GOVERNMENT OF SINDH

SINDH MASS TRANSIT AUTHORITY

REVISED MODIFIED PC-I

NAME OF SCHEME: INSTALLATION / UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI, LARKANA, SUKKAR, MIRPURKHAS

Revised PC-1 Cost: PKR 152.724 Million

A.D.P Scheme NO : 2590 (2021-22)

April, 2022

CONTENTS

PC-1 FORM

1. Name of the project **Indicate name of the project:**	INSTALLATION / UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI, LARKANA, SUKKUR, MIRPURKHAS
2. Location : • **Provide name of the District / Province** • **Attach a map of the area, clearly indicting the project location :**	 SINDH **<u>Project Location :</u>** KARACHI, LARKANA, SUKKUR, MIRPURKHAS Traffic signals for up-gradation and installation (of new signals) have been undertaken in Karachi, Larkana and Sukkur.
3. Authorities responsible for:- **Indicate name of the agency responsible for sponsoring, execution, operation & maintenance. For provincial projects, name of the concerned federal ministry be provided.**	
i) Sponsoring	Transport and Mass Transit Department, Government of Sindh. (**TMTD**)
ii) Execution	Sindh Mass Transit Authority (SMTA)
iii) Operation and maintenance	Traffic Engineering Bureau, KDA (for Signals in Karachi) and Municipal Commissioner in Sukkur And Larkana. Traffic signals are to be operated by Traffic Police.

<table>
<tr><td>4 a) Plan Provision

• If the project is included in the medium term / five year plan, specify actual allocation</td><td>The Administrative Approval of PC-1 was issued in January 2017 at the cost of PKR 143.220 Million by the TMTD. [Administrative Approval is attached at Page 252 (B)

The Project is included in the current five year plan as an ADP Scheme # 2590

<table><tr><th>Year</th><th>Allocation (M)</th><th>Expenditure (M)</th></tr><tr><td>2017-18</td><td>143.220</td><td>00</td></tr><tr><td>2018-19</td><td>71.610</td><td>37.295</td></tr><tr><td>2019-2020</td><td>107.414</td><td>00</td></tr><tr><td>2020-2021</td><td>70.894</td><td>37.168</td></tr><tr><td>2021-22</td><td>0.100</td><td>00</td></tr><tr><td colspan="2">TOTAL</td><td>74.463</td></tr></table></td></tr>
<tr><td>• If not included in the current plan, what warrants its inclusion and how is it now proposed to be accommodated.

• If the project is proposed to be financed out of block provision, indicate.</td><td>Not Applicable

Not Applicable</td></tr>
<tr><td>b) Provision in the current year PSDP / ADP</td><td>PKR: 0.1 Million in FY 2021-22</td></tr>
<tr><td>5. Project objectives and its relation-ship with sector objectives

The objectives of the sector / sub sector as indicated in the medium term / five-year plan be reproduced. Indicate objectives of the project and develop a linkage between the proposed project and sect oral objectives.</td><td>Considering the ever increasing traffic congestion in the metropolis of Karachi city and other urban areas including Sukkur and Larkana and Mirpurkhas, a scheme was envisaged to achieve the objectives of traffic management through installation of new traffic signals in Karachi, Sukkur, Larkana and Mirpurkhas . This also included upgradation of existing traffic signals in Karachi. In this regard, a PC-1 was earlier approved at the cost of PKR 143.22 Million. Through this scheme, it was envisioned that certain improvements would be possible in regularizing traffic flow and accident prevention.</td></tr>
<tr><td>• In case of revised Projects, indicate objectives of the project is different from original PC-I.</td><td>The project objectives are same as in the approved Modified PC-1 and as also mentioned above.

Detailed Background:

After competitive bidding process and as per SPPRA Rules, the work was awarded to <u>M/S Silicon Communication & Security JV M/S Ghause Builders</u> at the bid cost of PKR</td></tr>
</table>

161.164 Million, which was (12.5%) greater than the approved PC-1 cost i.e. **PKR 143.22 Million**.
[Work Order, Bid Evaluation Report, Comparative statements and Minutes of Procurement Committee Meeting are attached at Page No **252C & 252D**]

The **Modified PC-1** is being revised **i)** due to lowest evaluated bid amount which was **12.5% greater** than the approved Modified PC-1 Cost i.e.**143.220 Million** and
ii) due to some locations of signals had to be modified on the request from relevant offices and keeping in view the existing condition and traffic requirements of intersections in the current scenario. [Letters received from concerned authorities are attached at page No. 14 to 22/B as documentary evidence**).**

The comparison of (installation of new traffic Signals) and up-gradation of traffic signals in **Karachi**, as per approved modified PC-1 and Revised Modified PC-1 signals at attached at **Page No 11.** and **12** as documentary evidence.

The comparison of (installation of new traffic Signals) in **Sukkur** and **Larkana** as per Approved Modified PC-1 and Revised Modified PC-1 signals are attached at Page No **13** as documentary evidence.

i) During the execution of work in Karachi, Sukkur and Larkana there are certain locations where traffic signals have been installed which are different as in the original approved PC-1. It may be noted that these locations have been decided based on the ground realities of traffic movement and patterns, the briefing and site visit with local administration office. These changes along with relevant documentary evidence are included in this PC-1 for record purpose.

ii) Moreover, 06 traffic signals were to be installed in District Mirpurkhas but after visiting the site it was noted that there is no need to install traffic signals in Mirpurkhas from traffic congestion point of view, hence not feasible due to which it was decided at the policy level not to take-up installation of traffic signals in Mirpurkhas at this moment. However considering various requests and feasibility, traffic signals were added to be installed in Karachi. [refer to Minutes of Meeting at **Page No 252 I**]

The comparison of Modified PC-1 Cost, Contract Amount and Revised Modified PC-1 Cost is elaborated below:

Approved Modified PC-1 cost (A)	**Contract Amount after bidding (B)**	**Revised Modified PC-1 Cost (C)**
143.220 M	161.164 M	152.724 M

Revised Modified PC-1 (C) as compare to the Contract amount (B)	5.236% below
Revised Modified PC-1 (C) as compare to approved Modified PC-1 Cost (A)	6.635% above

iii) The progress of installation of traffic signals in each district till now and comparison of number of traffic signals as per approved PC-1 and Revised PC-1 is as below;

Karachi	**Approved Modified PC-1**	**Revised Modified PC-1**	**Completed**
Up-gradation	19	27	18
New	11	18	07
Sukkur	6	03	03
Larkana	05	05	05
Mirpurkhas	06	Nil	-
Total	47	53	33

iv) There are certain policy matters that form the basis of revision of approved Modified PC-1. This revised modified PC-1 does not include construction of command and control center (monitoring room) since there is a policy level discussion going on between traffic police office and KDA Traffic Engineering Bureau office as to where the monitoring room has to be constructed and which agency / department while be responsible to monitor the traffic signals through this monitoring room.

Second reason is rather more technical constructing the monitoring room infrastructure alone is not a preferred option. It has been discussed that construction of monitoring room with all relevant equipment including cameras need to be undertaken in Phase 2 of the project [refer to Minutes of Meeting at **Page No 252 I**].

6. Description, justification, technical parameters & technology transfer aspects (enclose feasibility study for projects) :

The intersections proposed for signalization are highly congested due to heavy load of traffic. The new traffic flow pattern have been planned and with improvement of road intersections signaling system and traffic engineering a positive change shall occur which shall also have positive environmental impact by reducing traffic congestion and hence fuel wastage. The project shall improve road safety and help in regularizing traffic.

• **Describe the project and indicate existing facilities in the area and justify the establishment of the Project.**	i) To reduce congestion & bottleneck from the intersection. ii) To provide improved facility and safer Movement to all users of the transport. iii)To reduce the number of accidents by providing a smooth and controlled traffic flow at intersections. iv) To ease and provide for proper channelized movement through intersections which are bond to result in reduce exhaust emissions and ease of difficulties faced by drivers at these locations.
• **Provide technical parameters i.e. input and output of the project. Also discuss technological aspect of the project.**	In the first phase of project **45** intersections are in Karachi, **05** intersections are in Larkana ,**03** intersections are in Sukkur are being taken up for signalize and improvement through Revised Modified PC-1 along with the some roadwork at specific locations in Karachi. In next phase sensor will install for the controller of line data from each intersection. Central Control of Signal, Capacity building of concerned Staff on the operation & Supervision of Signals. Also the construction & operation of monitoring room will be carried out in Phase 2.
• **Provide details of civil works, equipment, machinery and other physical facilities required for the project.**	The foot path improvement, fixing of kerb stones, cement paving block, foundation of signals poles and chambers, asphalt works are civil works being carried out. The equipment and machineries are available in local market.
• **Indicate governance issues of the sector relevant to the project and strategy to resolve the issues.**	The governance issues mainly involve the operating and maintenance of centralized signal system in various divisions of Sindh. In Karachi, the Traffic Engineering Bureau of KDA is taking care of operating and maintenance of traffic signals in close collaboration with Traffic Police office. The Signals installed or up-graded in Karachi under this project, so for have already been handed over to KDA's Traffic Engineering Bureau (Page no **32-52** up-gradation) & (Page no **110-119** New Installed) and *also* handed-over newly installed signals to **Sukkur Municipal Corporation** Page no **232 -236**. In Sukkur and Larkana and other divisions of Sindh, the responsibility to operate and maintain the traffic signals need to be assigned to a specific department (if there is any confusion), at the policy level from the P&D department. Also, capacity building of concerned traffic engineering departments and local municipalities be done on immediate basis for a better administrative role of these departments.
7. Capital Cost Estimate.	Revised Modified PC-1 Cost: Rs. 152.724 Million.

8. Annual operating and maintenance cost after completion of the project. Demand and supply analysis :	After completion of project *two years* maintenance included in PC-1. The signals in **Karachi**, after installation, have to be handed over to Traffic Engineering Bureau, KDA for subsequent maintenance and operations. The signals in **Sukkur**, after installation, have been handed over to Municipal Corporation Sukkur as already mentioned above. The signals in **Larkana** are yet to be handed over to **Municipal Corporation Larkana** for which efforts are being undertaken by writing various letters for handing-over. Documentary evidence at **Page No. 220A.** Satisfactory reports from P&D MEC is also attached as documentary evidence at Page No **220B**
9. Demand and supply analysis :	The improvement of intersections under consideration is to provide smooth traffic flow facility and reduce the chances of accidents and travelling time.
10. Financial plan and mode of Financing	It is envisaged that this on-going scheme is to be **completed positively**, in all aspects, in the **FY 2022-23.**
11. Project benefits and analysis	The project will beneficial for the road users in Karachi, Larkana and Sukkur and will reduce the accident at the location where the traffic signals installed, also provide smooth and congestion free traffic flow and to facilitates the pedestrians be safe and convenient and minimize the risk of life.
12. Economic	The improvement of intersections under consideration is to provide smooth traffic flow facility and reduce the chances of accidents and travelling time and hence lesser financial implications
• **Social Benefits with Indicators**	The installation of traffic signals will serve the General Public of Sindh and minimize the Road accidents.

• **Employment Generation.**	The project is being implemented in urban environment and job opportunities both for skilled / un skilled labor will be generated during the entire duration of the project.
• **Environmental**	The installation of traffic signals will improve the beautification of the road as well as corridors and will become the basis of better traffic management and eventually lesser environmental hazards.

13. Management structure and manpower requirements including specialized skills during construction and operational phases	The project is being implemented on through a contract based on SPPRA rules. The man power and machinery require will be made available by the contractor. Numbers of technical staff will be required by the sponsoring agency and supervising staff of electrical / mechanical (E&M) / Civil section will be required during its execution. The execution agency is SMTA but the signals, after installation, will be handed over to respective administrative offices/ municipality of Karachi, Larkana and Sukkur.
14. Additional project / decisions required to maximize socio-economic benefits from the proposed project	A policy decision is desired to establish the responsibility for one department, in each division, to maintain and monitor the performance of signals and their maintenance. Similarly the capacity building of these departments is also of immense importance to ensure smooth functioning.

15. It is certified that PC-I has been prepared as per guide lines issued by the planning commission for the preparation of PC-I for infrastructure project.

PREPARED BY : - Executive Engineer, (SMTA)

CHECKED BY: - Project Director, (SMTA)

Director Infrastructure /Planning, (SMTA)

RECOMMENDED BY: - Managing Director, (SMTA)

FORWARDED BY:- Secretary Transport & Mass Transit Department (GoS)

SUMMARY OF PC-1 COST

S.NO	NAME OF WORK	ORIGINAL PC-I				
		SIGNAL WORK	CIVIL WORK	SIGNAL WORK	CIVIL WORK	PAGE NO. & DESCRIPTION
1	UP-GRADATION OF SIGNALS AND TIDAL FLOW SYSTEM IN KARACHI	41,762,250	NIL	43,364,560	1,345,800	PAGE (53-56) & (93-95)
2	NEW TRAFFIC SIGNALS INSTALLED AT KARACHI	20,222,850	19,399,281	50,953,335	35,866,987	PAGE (120-123) & (178-192)
3	NEW TRAFFIC SIGNALS INSTALLED AT LARKANO	10,557,750	5,008,490	4,510,578	111,371	PAGE 209
4	NEW TRAFFIC SIGNALS INSTALLED AT SUKKUR	12,212,500	8,135,364	4,510,323	3,843,886	PAGE 223
5	NEW TRAFFIC SIGNALS INSTALLED AT MIRPURKHAS	12,783,500	8,135,364	**Remove from Scope**		
6	CONTROL ROOM	5,000,000		**Remove from Scope**		
	TOTAL AMOUNT	**102,538,850**	**40,678,499**	**103,338,796**	**41,168,044**	**TOTAL AMOUNT**
	ORIGINAL PC-1 SIGNAL AMOUNT	**102,538,850**		**103,338,796**	**REVISED PC-1 SIGNAL AMOUNT (A)**	
	ORIGINAL PC-1 CIVIL AMOUNT	**40,678,499**		**41,168,044**	**REVISED PC-1 CIVIL AMOUNT (B)**	
	TOTA ORIGINAL PC-1 AMOUNT	**143,217,349**		**5,223,285**	**Schedule Items (Amounting Rs. 34821898)Above 15% (C)**	
		143.22 M		**149,730,125**	**D = A+B+C**	
				2,994,603	**2% Contingencies 2% (D)**	
				152,724,728	**Total Revise PC-1 Cost**	
				152.724 M		

SUMMARY OF TOTAL COST & DETAIL SIGNALS

	ORIGINAL PC-1		REVISED PC-1	
	(A) NEW SIGNALS	**(B) UP GRADATION**	**(A) NEW SIGNALS**	**(B)UP GRADATION**
KARACHI	20,222,850 11 Nos	41,762,250 19 Nos	50,953,335 18 Nos	43,364,560 27 Nos
CONTROL ROOM KARACHI	500,000	Remove from Scope		
SUKKUR	12,212,500 5 Nos	_	4,510,323 3 Nos	_
LARKANA	10,557,750 5 Nos	_	4,510,578 5 Nos	_
MIRPURKHAS	12,783,500 6 Nos	Remove from Scope		
ORIGINAL PC-1 SIGNALS AMOUNT	(A) 60,776,600 (B) 41,762,250 **SUB.TOTAL 102,538,850**		(A) 59,974,236 (B) 43,364,560 **SUB.TOTAL RS :103,338,796**	
ORIGINAL PC_1 CIVIL AMOUNT	(C) civil works Rs 40,678,499		(C) civil works Rs 46,391,329 **Sub.Total** A+B+C Rs:149,730,125 (D) 2% Contingency Rs 2,994,603	
TOTAL PC-1 AMOUNT	Total PC_1 Amount A+B+C **Rs. 143,217,349** **143.22 M**		Total Revise PC-1 Amount A+B+C+D **Rs. 152,724,728** **152.725 M**	

SUMMARY OF TOTAL COST & DETAIL OF CIVIL WORKS

	ORIGINAL PC-1		REVISED PC-1			
	NEW	UP GRADATION	NEW	PAGE NO	UP GRADATION	PAGE NO
KARACHI	Rs:19,399,281 **11 Nos**	-	Rs:35,866,987 **15 Nos**	**177/A to 192**	Rs:1,345,800 **3 Nos**	92/A to 95
SUKKUR	Rs:8,135,364/- **6 Nos**	_	Rs:3,843,886 **2 Nos**	223	_	_
LARKANA	Rs:5,008,490/- **5 Nos**	_	Rs:111,371 **4 Nos**	209	_	_
MIRPUR KHAS	Rs:8,135,364/- **6 Nos**	_	Remove from Scope			
			Sub:(a) 39,822,244		Sub:(b) 1,345,800	
			A+B = Rs : 41,168,044/- Schedule Rate Amount (SR) Rs:34,821,898 Non Schedule Rate (NSR) Rs : 6,346,146 (C) Premium on schedule Rate above 15 % = Rs : 5,223,285/-			
	Total amount of PC-1 Civil **40,678,499/-**		**Total Amount of Revise Civil Work** **A+B+C Rs:46,391,329/-**			202/A to 205

KARACHI

INSTALLATION OF NEW TRAFFIC SIGNALS IN KARACHI

S.NO	NAME OF INTERSECTION IN ORIGINAL PC-I	NAME OF INTERSECTION IN REVISE PC-I	RECOMMENDED	STATUS	Page.No
1	SAMAMA SHOPPING CENTRE / UNIVERSITY ROAD	SHAH JAHAN AVENUE / SAMNABAD ROAD (GULBERG CHOWRANGI F.B.AREA)	BY DIG TRAFFIC KARACHI	COMPLETED	14
2	JOUHAR MOUR / RASHID MINHAS ROAD	SHAHRAH-E-JAHANGIR / ZIAUDDIN ROAD (TAHIR VILLA CHOWRANGI F.B.AREA)	BY DIG TRAFFIC KARACHI	COMPLETED	14
3	R.D.CHOWK /SITE AVENUE	SHAHRAH-E-JAHANGIR / AZIZABAD ROAD (COMPREHENSIVE SCHOOL F.B.AREA)	BY DIG TRAFFIC KARACHI	COMPLETED	14
4	MIRAN NAKA /MIRZA ADAM KHAN ROAD	TIPU SULTAN INTERSECTION / SHAHEED-E-MILLAT ROAD (UNDER FLY OVER)	BY PROJECT DIRECTOR FLY OVER LOCAL GOVERNMENT GOVERNMENT OF SINDH	COMPLETED	18
5	ICI CHOWK/G,ALLANA ROAD (OLD MARIPUR ROAD	M.A.JINNAH ROAD / I.I.CHUNDRIGAR ROAD (TOWER)	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	22/B
6	PMTF CROSSING/NATIONAL HIGHWAY	GULZAR-E-HIJRI CHOWK / PS SOHRAB GOTH	BY SSP TRAFFIC POLICE KARACHI	TO BE UNDERTAKEN	15
7	PORT QASIM CROSSING/NATIONAL HIGHWAY	PORT QASIM CROSSING/NATIONAL HIGHWAY	AS PER ORIGINAL PC-I	TO BE UNDERTAKEN	
8	TOWNSHIP CROSSING/NATIONAL HIGHWAY	TOWNSHIP CROSSING/NATIONAL HIGHWAY	AS PER ORIGINAL PC-I	TO BE UNDERTAKEN	
9	HABIB INTERSECTION / TEXTILE AVENUE SITE	HABIB INTERSECTION / TEXTILE AVENUE SITE	AS PER ORIGINAL PC-I	TO BE UNDERTAKEN	
10	MODEL COLONY GRAVEYARD / JINNAH AVENUE	MODEL COLONY GRAVEYARD / JINNAH AVENUE	AS PER ORIGINAL PC-I	COMPLETED	
11	MANZIL PETROL PUMP CROSSING / NATIONAL HIGHWAY	MANZIL PETROL PUMP CROSSING / NATIONAL HIGHWAY	AS PER ORIGINAL PC-I	TO BE UNDERTAKEN	
12		JAHANGIR ROAD / CLAYTON ROAD / M.A.JINNAH ROAD (GRUMANDIR)	BY PROJECT DIRECTOR SIDCL GREEN LINE	COMPLETED	16
13		SAHBA AKHTAR ROAD / SHAHRAH-E- AL QUDS (MOUCHI MOUR)	BY DIG TRAFFIC KARACHI	COMPLETED	20
14		ABUL ASAR HAFEEZ JALANDHARI ROAD / KAMRAN CHOWRANGI GULISTAN-E-JAUHAR	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
15		ABUL ASAR HAFEEZ JALANDHARI ROAD / MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
16		MAI KOLACHI ROAD / NLC CUT	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
17		NASIR JUMP KORANGI 12000 ROAD	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
18		KORANGI NO-4 KORANGI 12000 ROAD	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20

(11)

UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI

S.NO	NAME OF INTERSECTION IN ORIGINAL PC-I	NAME OF INTERSECTION IN REVISE PC-I	RECOMMENDED		Page.No
1	KHAYABAN-E-JAMI/KHAYABAN-E-SADDI (BOAT BASIN)	KHAYABAN-E-JAMI/KHAYABAN-E-SADDI (BOAT BASIN)	AS PER ORIGINAL PC-I	COMPLETED	
2	KHAYABAN-E-IQBAL / CHARTERED ACCOUNTANTS AVENUE (THREE SWORDS)	KHAYABAN-E-IQBAL / CHARTERED ACCOUNTANTS AVENUE (THREE SWORDS)	AS PER ORIGINAL PC-I	COMPLETED	
3	CH.KHALIQ-UZ-ZAMAN ROAD / CHARTERED ACCOUNTANTS AVENUE (RACE COURSE)	CH.KHALIQ-UZ-ZAMAN ROAD / CHARTERED ACCOUNTANTS AVENUE (RACE COURSE)	AS PER ORIGINAL PC-I	COMPLETED	
4	CH. KHALIQ UZZAM / LILLY BRIDGE ROAD	CH. KHALIQ UZZAM / LILLY BRIDGE ROAD	AS PER ORIGINAL PC-I	COMPLETED	
5	CHAND BIBI BRIDGE / CSD / KALA PUL	CHAND BIBI BRIDGE / CSD / KALA PUL	AS PER ORIGINAL PC-I	COMPLETED	
6	HOSHANG ROAD / ZIAUDDIN AHMED ROAD	HOSHANG ROAD / ZIAUDDIN AHMED ROAD	AS PER ORIGINAL PC-I	COMPLETED	
7	HOSHANG ROAD/ ABDULLAH HAROON ROAD	HOSHANG ROAD/ ABDULLAH HAROON ROAD	AS PER ORIGINAL PC-I	COMPLETED	
8	DR. ZIAUDDIN AHMED ROAD / M.T.KHAN ROAD / CLUB ROAD (PIDC)	DR. ZIAUDDIN AHMED ROAD / M.T.KHAN ROAD / CLUB ROAD (PIDC)	AS PER ORIGINAL PC-I	COMPLETED	
9	SHAHEED MILAT ROAD / KHALID BIN WALID ROAD (MEDICARE)	SHAHEED MILAT ROAD / KHALID BIN WALID ROAD (MEDICARE)	AS PER ORIGINAL PC-I	COMPLETED	
10	SHAHEED MILAT ROAD / TARIQ ROAD (M.CHOWRANGI)	SHAHEED MILAT ROAD / TARIQ ROAD (M.CHOWRANGI)	AS PER ORIGINAL PC-I	COMPLETED	
11	SHAHEED-E-MILLAT ROAD / SIRAJ -UD-DAULA ROAD	SHAHEED-E-MILLAT ROAD / SIRAJ -UD-DAULA ROAD	AS PER ORIGINAL PC-I	COMPLETED	
12	NATIONAL STADIUM / PIR SIBGHATULLAH ROAD	NATIONAL STADIUM / PIR SIBGHATULLAH ROAD	AS PER ORIGINAL PC-I	COMPLETED	
13	RUB HOSPITAL GULSHAN / SHABBIR USMANI ROAD	RUB HOSPITAL GULSHAN / SHABBIR USMANI ROAD	AS PER ORIGINAL PC-I	COMPLETED	
14	YASEEN ABAD / SHABBIR USMANI ROAD	YASEEN ABAD / SHABBIR USMANI ROAD	AS PER ORIGINAL PC-I	COMPLETED	
15	TIPU SULTAN ROAD/SHAHEED-E-MILLAT ROAD	ABDULLAH HAROON ROAD / CLUB ROAD (HOTEL METROPOLE)	BY TRAFFIC ENGINEERING BUREAU KDA	COMPLETED	22/A
16	DISCO BAKERY GULSHAN / SHABBIR USMANI ROAD	M.R.KIYANI RD / DR.ZIAUDDIN ROAD (SHAHEEN COMPLEX)	BY TRAFFIC ENGINEERING BUREAU KDA	COMPLETED	22/A
17	JOHAR CHOWRANGI/HAFEEZ JALHANDRI ROAD	NAVY GATE / HIR ROAD	BY TRAFFIC ENGINEERING BUREAU KDA	COMPLETED	22/A
18	GHANI CHOWRANGI /ESTATE AVENUE	MAINSFIELD STREET/PREEDY STREET EXTENSION (SADAR DAWAKHANA)	BY TRAFFIC ENGINEERING BUREAU KDA	TO BE UNDERTAKEN	22/A
19	SHARFABAD / ALAMGIR ROAD	JAMSHED ROAD BANORIA CHOWK	BY DIG TRAFFIC KARACHI	COMPLETED	20
20		RAITA PLOT SHAH FAISAL COLONY	BY TRAFFIC ENGINEERING BUREAU KDA	TO BE UNDERTAKEN	22/A
21		SOLDIER BAZAR	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
22		LOVE LANE INTERSECTION / NISHTER ROAD	BY DIG TRAFFIC KARACHI	TO BE UNDERTAKEN	20
23		BANK AL-FALAH / I.I.CHUNDRIGAR ROAD	BY SSP TRAFFIC SOUTH	TO BE UNDERTAKEN	22/B

(21)

24		NBP HEAD OFFICE / I.I.CHUNDRIGAR ROAD	BY SSP TRAFFIC SOUTH	TO BE UNDERTAKEN	22/B
25		HBL PLAZA / I.I.CHUNDRIGAR ROAD	BY SSP TRAFFIC SOUTH	TO BE UNDERTAKEN	22/B
26		UNI TOWER / I.I.CHUNDRIGAR ROAD	BY SSP TRAFFIC SOUTH	TO BE UNDERTAKEN	22/B
27		TIDAL FLOW SYSTEM AT I.I.CHUNDRIGAR ROAD	BY SSP TRAFFIC SOUTH	TO BE UNDERTAKEN	22/B

NEW TRAFFIC SIGNALS LARKANA

S.NO	NAME OF INTERSECTION IN ORIGINAL PC-I	NAME OF INTERSECTION IN REVISE PC-I	RECOMMENDED		
28	NEW DARO CHOWK	SUBHANALLAH CHOWK	BY DSP TRAFFIC LARKANO	COMPLETED	207
29	BANK SQAUARE	KAMBER ROAD	BY DSP TRAFFIC LARKANO	COMPLETED	207
30	CITY MEDICAL CENTER	CITY MEDICAL CENTER	AS PER ORIGNAL PC-1	COMPLETED	
31	CHANDKA CHOWK	CHANDKA CHOWK	AS PER ORIGNAL PC-1	COMPLETED	
32	TALUKA POLICE STATION	TALUKA POLICE STATION	AS PER ORIGNAL PC-1	COMPLETED	

NEW TRAFFIC SIGNALS SUKKUR

S.NO	NAME OF INTERSECTION IN ORIGINAL PC-I	NAME OF INTERSECTION IN REVISE PC-I	RECOMMENDED		
33	POLICE HEAD QUARTER CHOWK	BY PASS CHOWK	BY MAYOR SUKKUR	COMPLETED	233/A
34	CLOCK TOWER CHOWK	COURT CHOWK	BY MAYOR SUKKUR	COMPLETED	233/A
35	MUHAMMADI CHOWK	LAB-E-MEHRAN CHOWK	BY MAYOR SUKKUR	COMPLETED	233/A
36	DOLPHIN CHOWK		AFTER PHYSICAL SURVEy NOT REQ:		
37	GHARAM GODI CHOWK		AFTER PHYSICAL SURVEy NOT REQ:		
38	SHIKARPUR CHOWK		AFTER PHYSICAL SURVEy NOT REQ:		

(13)

(14)

OFFICE OF THE
DEPUTY INSPECTOR GENERAL OF POLICE,
TRAFFIC, KARACHI.

No. DIGP/Traffic/RDR/(2467)/927-31 /Khi.
Dated: - 06 -04-2018.

SMTA
Pl forward to SE(TCO) for taking further n/a in the matter. 6/4/18

The Senior Director,
Traffic Engineering Bureau,
Karachi Development Authority,
8th Floor Civic Centre, Gulshan-e-Iqbal,
Karachi.

(Attn: Mr. Azeem)

Subject: - **INSTALLATION OF TRAFFIC LIGHT SIGNALS ALONGWITH COUNTDOWN TIMER.**

Reference: List of 12 new proposed light signals alongwith countdown timer provided by Mr. Azeem, Assistant Traffic Engineer, TEB, KDA, Karachi.

The matter was referred to all concerned SsP/Traffic Districts, Karachi for getting their feasibility report from traffic point of view.

The feasibility report received from them is as under for further necessary action into the matter accordingly: -

S.#	Name of Road	Proposed Location/ Light Signal	Comments by Traffic Police
1	Shah Jahan Avenue	Gulberg Chowrangi	Feasible
2	Shahrah-e-Jahangir	Tahir Villa Chowrangi	Feasible
3	Shahrah-e-Jahangir	Comprehensive School/NED Lawn	Feasible
4	University Road	Samama Shopping Centre	Not Feasible
5	University Road	Under Flyover at Sir Syed University	Not Feasible
6	Mirza Adam Khan Rd	Miran Naka Intersection	Not Feasible
7	G. Allana Road	ICI Chowk	Not Feasible
8	Estate Avenue	R.D Chowk	Not Feasible
9	Textile Avenue	Habib Intersection SITE	Feasible
10	Jinnah Avenue	Model Colony Graveyard	Feasible
11	National Highway	Manzil Petrol Pump Crossing	Feasible
12	National Highway	Township Crossing	Feasible

(IMRAN YAQOOB MINHAS), PSP
Deputy Inspector General of Police,
Traffic, Karachi.

Copy to SsP/Traffic District Central, East, West & Malir, Karachi.

(15)

OFFICE OF THE
SENIOR SUPERINTENDENT OF POLICE
TRAFFIC, DISTRICT MALIR
KARACHI

No. SSP/T/MALIR/RDR/ 351-53 /2018, Karachi, dated: - 14-02-2018.

The Senior Director,
Transport & Communication,
Department Karachi.
(Metropolitan Corporation,
8th floor Civic Center Gulshan-e-Iqbal, Karachi.)

Subject: - **INSTALLATION OF TRAFFIC LIGHT SIGNALS.**

It is submitted that due to increase of huge volume of traffic at Abdul Hassan Isphani road, Traffic Police is facing difficulties to mange flow of traffic manually especially at late night hours, on following places are require to be install Traffic Light Signals.

- Madras Chowk (New Sabzi Mandi Traffic Section)
- Gulzar-e-Hijri Chowk / PS Sohrab Goth (Superhighway)

It is therefore, requested the concerned staff may please be directed to install the above mentioned Traffic Light Signals immediately in the interest of smooth flow of traffic.

(TAHIR AHMED NOORANI)
Senior Superintendent of Police, Traffic
District Malir Karachi.

Copy to:-
1. The Deputy Inspector General of Police, Traffic Karachi, for kind information.
2. DSsP/Traffic Gulzar-e-Hijri, for information and pursue this matter with concerned department, till the installation of above Traffic Light Signals, under intimation to this office.

16

KARACHI INFRASTRUCTURE DEVELOPMENT COMPANY LTD.
MINISTRY OF COMMUNICATIONS
GOVERNMENT OF PAKISTAN
6th Floor, Extension Block, Bahria Complex IV, Gizri, Karachi
Tel: 021-35155101, Fax: 021-35155102
info@greenline.gov.pk; www.greenline.gov.pk

KIDCL (GLBRTS) /GM (Engr)/2018/**4419**
Dated: August 28th, 2018

Mr. Tahseen
PL: prepare proposals and attend the meeting with me?

The Deputy Commissioner,
District East,
Karachi.

PROJECT: **GREEN LINE BRTS FROM KESC POWER HOUSE CHOWRANGI SURJANI TO MUNICIPAL PARK SADDAR KARACHI.**

SUBJECT: **REMOVAL OF GARBAGE, DEBRIS & SURPLUS CONSTRUCTION MATERIALS FROM LASBELLA, PATEL PARRA & GURUMANDIR GREEN LINE BRTS CORRIDOR.**

Sir,

Refer to today's meeting that were held in Deputy Commissioner Office (East) regarding the aforementioned subject matter. Following were the participants of meeting.

1	Mr. Ahmed Ali Siddiqui	Deputy Commissioner East
2	Mr. Omer Randhawa	Asst. Commissioner Jamshaid Town
3	Mr. Yaqoob Maher	D.S.P Traffic East
4	Mr. Talat Hussain	S.O Traffic East
5	Mr. Tariq Mughal	S.E, D.M.C East
6	Mr. Tahseen Zaidi	Asst. Traffic Engineer (TEB)
7	Mr. Khalid ~~Aziz~~ Hafeez	Director T.E.B
7	Mr. Syed Qaiser Ali	Manager Technical, KIDCL
8	Mr. Shafi M. Chachar	Manager MEP, KIDCL

Karachi Infrastructure Development Company Limited had completely cleared the Green Line BRTS corridor along with existing main roads and service roads from **Lasbella/Patel Parra & Gurumadir area** which includes Debris, Surplus materials, Construction waste and Garbage also.

Traffic Engineering Bureau committed that they will finalize & sign the layout plan for Gurumandir Intersection by coming Friday 3:00 Pm. KIDCL will Restore the Gurumandir Intersection accordingly.

KIDCL managers pointed out that Members of Monitoring Committee of Green Line BRTS coming from Islamabad will visit the Project on 1st week of September 2018.

KIDCL managers requested that Horse cart parking under the Green Line BRTS Bridge near Patel Parra must be removed on immediate basis, all the burnt motor cars/ auto rickshaws also remove from the road, and removal of parking of vehicles from the median of Green Line BRTS Corridor. Deputy Commissioner assured that Horse cart parking, burnt vehicles will be removed within a week.

Regards,

29/08/2018

Engr. Syed Qaiser Ali,
Manager Technical
KIDCL
Email: mgr.tech@greenline.gov.pk
Cell: 0333-8775366

Copy for information to:

1- C.E.O (KIDCL)
2- GM (F&A) / CFO (KIDCL)
3- Chief Engineer/GM(Engg) (KIDCL)
4- Chairman D.M.C (East)
5- CRE-I EA Consulting Pvt. Ltd.
6- Master file
7. Director, TEB, KDA

LOCAL GOVERNMENT PROJECTS
OFFICE OF THE PROJECT MANAGER
FLYOVER ON SHAHEED-E-MILLAT ROAD

No. PM/Flyover/LGD/ 106 Dated 04-06-2018

Managing Director,
Sindh Mass Transit Authority,
Government of Sindh

SUBJECT **INSTALLATION OF NEW TRAFFIC SIGNAL UNDER SHAHEED-E-MILLAT / TIPU SULTAN JUNCTION FLYOVER**

It is submitted that while construction of subject mentioned flyover, existing traffic signal was removed by the TEB, KDA temporarily but the same were installed as per new geometry under the flyover so that traffic flow can be run smoothly and after survey of the site it is observed that there is a need of traffic signal.

In view of above it is requested that traffic signal may be installed under the subject mentioned flyover please.

Project Manager
Local Government Projects
Government of Sindh

Copy to:-

1. The Project Director, Mega Project, LGD, GOS
2. Senior Director, TEB, KDA

(19)

OFFICE OF THE
DEPUTY INSPECTOR GENERAL OF POLICE,
TRAFFIC, KARACHI.

No.DIGP/Traffic/RDR/(2469)/ 550-61 /Karachi,
Dated: - 08 -02-2021.

The Secretary,
Transport & Mass Transit Department,
Govt. of Sindh,
Karachi.

{Attn: Section Officer (Vigilance)}

Subject: - **IDENTIFICATION OF LOCATIONS FOR UPGRADATION OF OLD TRAFFIC SIGNALS AND INSTALLATION OF NEW TRAFFIC SIGNALS IN KARACHI.**

Kindly refer to office letter No.SO(Vig)3(46)/ADP/1902/2020, dated 30-12-2020, on the subject noted above.

2/- Matter under reference was referred to all SsP Traffic Districts, Karachi for identification of suitable locations for upgradation of old traffic signals and installation of new traffic signals for reduction of traffic congestion and such report is as under:-

a) **TRAFFIC LIGHT SIGNALS NEED TO BE UPGRADED (WITH COUNT DOWN TIMERS):**

S.#	Traffic Section	Name of Road	Location of Traffic Signal	Remarks
		District South		
1	Clifton	Khayaban-e-Jami	Boat Basin Light Signal	Need Upgradation
2	A.S.Ghazi	Khayaban-e-Shujaat	Shujaat/Mujahid Light Signal	-do-
3	Abdullah Haroon Road	Abdullah Haroon Road	Angle Light Signal	-do-
4			Paradise Light Signal	-do-
5		Zaib-un-Nisa Street	Haji Dosal Light Signal	-do-
6		Fatima Jinnah Road	Marina Light Signal	-do-
7	Sea View	Khayaban-e-Shujaat	Kh:-e-Ittehad/Shujaat Light Signal	-do-
8	Cantt	Fatima Jinnah Road	Lilly Light Signal	-do-
		District City		
9	Eidgah	M. A. Jinnah Road	Eidgah Chowk	Need Upgradation
10	Gul Plaza	M. A. Jinnah Road	Frere Chowk	-do-
11	Preedy	Preedy Street	Gulzar Chowk, Singer Display Centre	-do-
12	Preedy	Abdullah Haroon Road	Café George Signal Regal Intersection	-do-

12/02/2021
Dir Infra
Khan Shah (XEN)
Pl discuss and put up.

RECEIVED SMTD
Dy No: ...
Dated: 10-02-2021

District East				
13	Shah Faisal	Shah Faisal No.2 Road	Raita Plot Signal	Need Upgradation
14	Gulistan-e-Jauhar	Prof. Ghafoor Ahmed Road	Karman Chowrangi Signal	-do-
15			Munawwar Chowrangi	-do-
16			Jauhar Chowrangi	-do-
17	Aziz Bhatti	Sehba Akhtar Road	Gillani Light Signal	-do-
18	Mazar-e-Quaid	Bahadur Yar Jang Road	Soldier Bazaar No.3 Signal	-do-
District Malir				
19	L.I.A	L.I.A Road	Dawood Chowrangi	Need Upgradation

b) <u>NEW TRAFFIC LIGHT SIGNALS REQUIRED (WITH TIMER):</u>

S.#	Traffic Section	Name of Road	Location of Traffic Signal	Remarks
District South				
1	Sea-View	26th Street	26th Street / Kh:-e-Mohafiz	Further Required
2			26th Street / Kh:-e-Bukhari	-do-
3		Khayaban-e-Shaheen	Kh:-e-Shaheen / Mohafiz	-do-
4			Kh:-e-Shaheen / Bukhari	-do-
5		Khayaban-e-Shujaat	Kh:-e-Shujaat / Mohafiz	-do-
6			Kh:-e-Shujaat / Bukhari	-do-
7		Khayaban-e-Ittehad	Kh:-e-Faisal / Ittehad	-do-
8			Kh:-e-Rahat / Ittehad	-do-
9			Village Hotel	-do-
District City				
10	Risala	Chand Bibi Road	Chand Bibi Chowk	Further Required
11	Garden	Nishter Road	Murad Khan Intersection	-do-
12			Love Lane Intersection	-do-
13	Gul Plaza	Agha Khan-III Road	Ankle Seria Intersection	-do-
14	Kharadar	M. A. Jinnah Road	Meriwether Tower	-do-
District East				
15	Shah Faisal	Bagh-e-Korangi Road	Hashim Shah Mazaar Cut	Further Required

District Korangi

(21)

16	Awami Colony	12000 Road	Korangi No.4 Chowk	Further Required
17	Ibrahim Hyderi		Nasir Jump Chowk	-do-
District West				
18	Sultanabad	Mai Kolachi Road	NLC Chowk	Further Required
19	Saeedabad	Hub River Road	Dabba Mour	-do-
District Malir				
20	Malir City	National Highway	Malir Mandir	Further Required
21	Quaidabad		Manzil Pump	-do-
22	Shah Latif		NLC Cut near Malir Jail	-do-
23			Babar Weighbridge (Kanta)	-do-
24			Choukandi Graveyard	-do-
25	Steel Town		Steel Township Mour	-do-
26			Gulshan-e-Hadeed Cut	-do-
27	L.I.A	L.I.A Road	Landhi 89 Crossing	-do-
28			Younus Chowrangi	-do-
29		8000 Road	Future Mour	-do-
30	Mehran Highway	Mehran Highway	General Tyre	-do-
31			Zone Crossing Cut	-do-

Furthermore, in pursuance of decision regarding establishment of Traffic Signals Control Room taken in the meeting on 29-01-2021 under chairmanship of your kind self, it is suggested that Control Room should be established in this office (T.R.O) for timely responding to any traffic issue on the roads.

(IQBAL DARA) PSP,
Deputy Inspector General of Police,
Traffic, Karachi.

Copy to:-
- The Managing Director, Sindh Mass Transit Authority, Karachi.
- The Senior Director, TEB, KDA, Karachi.
- PS to IGP Sindh, Karachi.
- PS to Addl: IGP Karachi.
- All SsP Traffic Districts, Karachi.

(22)

OFFICE OF THE SENIOR DIRECTOR
KARACHI DEVELOPMENT AUTHORITY

8th floor, main Civic Centre Building, Gulshan-e-Iqbal, Block-14 Karachi.

DATE: 19-03-2021

NO. EE/TC&O/TEB/KDA/...17/A.../2021

To.

The Managing Director,
Sindh Mast Transit Authority.
Transport Department, GoS.
Karachi.

SUBJECT: **REQUEST FOR INSTALLATION OF TRAFFIC SIGNAL AT JUNCTION OF MAI KOLACHI ROAD / NLC CUT.**

It is brought to our knowledge through your letter No. SO(Vig)3(99)ADP/1902/2021 addressed to Director General, Karachi Development Authority that Sindh Mast Transit Authority has undertaken the installation of traffic signals in Karachi under ADP Scheme No. 1902. The NLC and DIG Traffic, Karachi are pressing hard for installation of traffic signal on the subjected location. In this connection, TEB has conducted the survey of above location and found that there is urgent need of signal to regulate the traffic movement. In this connection, engineering department of KDA is already undertaken the road geometry improvement work on the site.

In view of the above, it is requested that Sindh Mast Transit Authority may install the traffic on above location.

An early action in this regard will highly be appreciated.

SENIOR DIRECTOR (TEB)
Karachi Development Authority

Copy for information please:

1. Chief Engineer (Dev). K.D.A.

09/6/2021
Dir Infra / XEN

L. 264
08.06.2021

22/A

OFFICE OF THE SUPERINTENDING ENGINEER
TRAFFIC ENGINEERING BUREAU
KARACHI DEVELOPMENT AUTHORITY

SE/TC&O/TEB/KDA/2018/ 92 Dated 19-10-2018

The Managing Director
Sindh Mass Transit Authority,
TMTD, GOS,
Karachi

SUBJECT **INSTALLATION / UP-GRADATION OF TRAFFIC SIGNAL AT KARACHI, SUKKUR, LARKANA & MIRPURKHAS**

It is informed that as per scope of work in respect of up-gradation of Traffic Signals, by SMTA TMTD, GOS for the signals presently working under the jurisdiction of Traffic Engineering Bureau KDA some of the Traffic Signals have already been up-graded by TEB, KDA, hence in this regard we would like to request and recommend you to change the location for the following intersections.

S. No.	As per your List	Recommended Site by TEB KDA
1	Tipu Sultan Road / Shaheed-e-Millat Road	Abdullah Haroon Road / Club Road (Hotel Metropole)
2	Johar Chowrangi	HIR Road / Navy Gate
3	Disco Bakery Gulshan-e-Iqbal	M.R. Kiyani Road / Ziauddin Road (Shaheen Complex)
4	Ghani Chowrangi SITE	Mainsfield Street / Preedy Street Extension (Saddar Dawakhana)
5	Sharfabad Alamgir Road	Jamshed Road / Banoria Chowk

Superintending Engineer
TC&O, TEB, KDA

Copy to:-
1. The Senior Director, TEB, KDA

22/10

OFFICE OF THE
SENIOR SUPERINTENDENT OF POLICE
TRAFFIC DISTRICT SOUTH
KARACHI.

NO. SSP/T/SOUTH/RDR/ 2039-4/1
DATED :-22-04-2021.

To,

Managing Director,
Sindh Mass Transit Authority,
Government of Sindh, **Karachi.**

Subject: - **UP-GRATION & INSTALLATION OF TRAFFIC SIGNALS & TIDA[L] FLOW SYSTEM AT I.I CHUNDRIGARH ROAD KARACHI.**

It is requested that regarding subject matter the signals & tidal flo[w] system at i.i chundrigarh road karachi are not functional, so it requested that pleas[e] be install the Signals & Tidal Flow System at I.I Chundrigarh Road Karachi to reduc[e] Traffic issues, & betterment of Traffic system in the better interest of General Public

Submitted for kind considered & necessary action please.

(MUHAMMAD AHMED BAIG)SPS,UNPM,
Superintendent of Police, Traffic,
District South, **Karachi.**

- Copy submitted to the Deputy Inspector General of Police Traffic Karac[hi] for kind information.
- Copy submitted to director TEB, KDA, for kind information & necessa[ry] action accordingly please.

18-5-2021

(MUHAMMAD AHMED BAIG)SPS,UNPM,
Superintendent of Police, Traffic,
District South, **Karachi.**

TRAFFIC ENGINEERING BUREAU
KARACHI DEVELOPMENT AUTHORITY

8th Floor, Civic Centre, Gulshan-e-Iqbal, Karachi
Ph: 021-99230655 Fax: 99231304

No. TC&O/TEB/KDA/2022/ 17 Dated.24-03-2022

Doc Info

The Managing Director,
Transport & Mass Transit Department,
Sindh Mass Transit Authority,
Government of Sindh.
Karachi

SUBJECT:- INSTALLATION OF NEW TRAFFIC SIGNALS FROM ONGOING THE PROJECT FOR "INSTALLATION/UP-GRADATION OF TRAFFIC SIGNALS AT KARACHI, SUKKUR, LARKANA & MIRPURKHAS UNDER THE ADP SCHEME NO-1902.

It is requested to install new traffic signals in Karachi from the ongoing above said project as we have attended several meetings with traffic police and received letters from different agencies. The SSP (Traffic), District Korangi, Karachi has also requested to install new traffic light signals at Nasir Jump 12000 Road & Korangi No. 12,000 Road Korangi intersections (copy of the letter is attached).

It is also mentioned here that a meeting was held with the worthy Secretary, Transport & Mass Transit Department, GOS with Senior Director (TEB), KDA, on the on-going project. In the said meeting, it was decided that new locations in Karachi Division may be finalized for installation of traffic signals and Revised PC-I may be forwarded to P&D Department, Government of Sindh for approval.

In this regard, we request you to kindly complete the new installation of traffic signal works as mentioned above in Karachi for the safety and security of motorist and pedestrians.

Encls:- As above.

Executive Engineer (TC&O)
T.E.B., KDA

Copy to:

1. The Senior Director, TEB, KDA
2. The DIG, Traffic, Police, Karachi.
3. The S.S.P, Traffic Police, District Korangi, Karachi.

INFRA

RECEIVED
SMTA-TMTD
Dairy No: L-216
Dated: 25-03-2022

OFFICE OF THE
SENIOR SUPERINTENDENT OF POLICE
TRAFFIC DISTRICT KORANGI, KARACHI.

No: SSP / T / Korangi /RDR / 2840-43 /
Karachi, Dated: 21 -03-2022

The
Director Traffic Engineering Bureau,
Karachi Development Authority,
Karachi.

Subject: - **INSTALLATION / REPAIRING OF TRAFFIC LIGHT SIGNALS**

In the process of recommendations made by the Sindh human rights Commission in a meeting held on 28-02-2022 at their office regarding Traffic and Transportation Issues of District Korangi.

Following points of this traffic district needs installation of traffic light signals to manage traffic flow automatically.

S. No:	Point	Road	Traffic Section
1.	Nasir Jump	12000 Ft. Road	Ibrahim Hyderi
2.	Korangi No: 4	12000 Ft. Road	Awami Colony

Following light signal is already installed but out of order kindly make it functional.

S. No:	Point	Road	Traffic Section
1.	Raita Plot Chowk	Korangi Shah Faisal Road	Shah Faisal Colony

Report is submitted for early action please.

(MUHAMMAD AHMED BAIG). SPS UNPM
SENIOR SUPERINTENDENT OF POLICE
TRAFFIC, DISTRICT KORANGI
KARACHI

Copy to: -

- The DIGP Traffic Karachi for information please.
- The Sindh Human Rights Commission w/r to his letter quoted above.
- DSP Traffic-II Landhi, District Korangi Karachi for information.

24/3/22
Ex En & Azeem
Discuss

OFFICE OF THE SENIOR DIRECTOR
KARACHI DEVELOPMENT AUTHORITY

8th floor, main Civic Centre Building, Gulshan-e-Iqbal, Block-14 Karachi.

NO. EE/TC&O/TEB/KDA/..17/A../2021 DATE: 19-03-2021

To.

The Managing Director,
Sindh Mast Transit Authority.
Transport Department. GoS.
Karachi.

Mai Kolachi / NLC Cut

SUBJECT: **REQUEST FOR INSTALLATION OF TRAFFIC SIGNAL AT JUNCTION OF MAI KOLACHI ROAD / NLC CUT.**

It is brought to our knowledge through your letter No. SO(Vig)3(99)ADP/1902/2021 addressed to Director General, Karachi Development Authority that Sindh Mast Transit Authority has undertaken the installation of traffic signals in Karachi under ADP Scheme No. 1902. The NLC and DIG Traffic, Karachi are pressing hard for installation of traffic signal on the subjected location, in this connection, TEB has conducted the survey of above location and found that there is urgent need of signal to regulate the traffic movement. In this connection, engineering department of KDA is already undertaken the road geometry improvement work on the site.

In view of the above, it is requested that Sindh Mast Transit Authority may install the traffic on above location.

An early action in this regard will highly be appreciated.

SENIOR DIRECTOR (TEB)
Karachi Development Authority

Copy for information please:

1. Chief Engineer (Dev). K.D.A.

09/6/21 XEN

Dir Infra

L-264
03.06.2021

No. SMTA/INFRA/SIG/2021/L-72
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORITY

Karachi, dated: 25-Feb- 2021

SAY NO TO CORRUPTION

To,

Deputy Commissioner,
South,
Karachi.

Subject: **Installation/Upgradation of Traffic Signals at Karachi Sukkur Larkana & Mirpurkhas under the ADP Scheme No.1902**
(Upgradation of Traffic Signal at boat basin)

I am directed to refer to the subject noted above and state that Transport and Mass Transit Department Government of Sindh, through Sindh Mass Transit Authority [SMTA] has undertaken the subject project.

Upgradation of existing traffic signal at Boat Basin intersection is part of approved PC-1 and SMTA intends to taken up the upgradation works in this regard.

In this regard, this is for your prior information that the above- mentioned works will be started within week's and the works will include Road Cutting, As well. Necessary information to the SSP Traffic South is also provided prior to the start of works.

We hope an extensive team work will be conducted in the best interest of the project.

02/3/2021
Dir Infra

KHAN MUHAMMAD SHAH
EXECUTIVE ENGINEER
SMTA,GoS

A copy is forwarded for information to:

1. Managing Director, Sindh Mass Transit Authority, GoS, Karachi
2. Director Infra/Project, Sindh Mass Transit Authority, GoS, Karachi
3. The P.S to Secretary, Transport and Mass Transit Department, GoS, Karachi
4. Master File

House No. & D-43/1, Shahrah-e-Ghalib, Block-2, Clifton, (near Bilawal Chowrangi), Karachi. Phone 021-99332207-8

HIGH PRIORITY TRAFFIC SIGNALS FOR INTELIGENT TRAFFIC SYSTEM ON KARACHI ROAD MAP



TRANSPORT & COMMUNICATIO DEPARTMENT, IT SECTION,

24

LIST OF UP-GRADATION TRAFFIC SIGNALS IN KARACHI

(47)

LIST UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI

AS PER PC-I		AS PER REVISE PC-I	
S.NO	NAME OF INTERSECTION	S.NO	NAME OF INTERSECTION
1	KHAYABAN-E-JAMI/KHAYABAN-E-SADDI (BOAT BASIN)	1	KHAYABAN-E-JAMI/KHAYABAN-E-SADDI (BOAT BASIN)
2	KHAYABAN-E-IQBAL / CHARTERED ACCOUNTANTS AVENUE (THREE SWORDS)	2	KHAYABAN-E-IQBAL / CHARTERED ACCOUNTANTS AVENUE (THREE SWORDS)
3	CH.KHALIQ-UZ-ZAMAN ROAD / CHARTERED ACCOUNTANTS AVENUE (RACE COURSE)	3	CH.KHALIQ-UZ-ZAMAN ROAD / CHARTERED ACCOUNTANTS AVENUE (RACE COURSE)
4	CH. KHALIQ UZZAM / LILLY BRIDGE ROAD	4	CH. KHALIQ UZZAM / LILLY BRIDGE ROAD
5	CHAND BIBI BRIDGE / CSD / KALA PUL	5	CHAND BIBI BRIDGE / CSD / KALA PUL
6	HOSHANG ROAD / ZIAUDDIN AHMED ROAD	6	HOSHANG ROAD / ZIAUDDIN AHMED ROAD
7	HOSHANG ROAD/ ABDULLAH HAROON ROAD	7	HOSHANG ROAD/ ABDULLAH HAROON ROAD
8	DR. ZIAUDDIN AHMED ROAD / M.T.KHAN ROAD / CLUB ROAD (PIDC)	8	DR. ZIAUDDIN AHMED ROAD / M.T.KHAN ROAD / CLUB ROAD (PIDC)
9	SHAHEED MILAT ROAD / KHALID BIN WALID ROAD (MEDICARE)	9	SHAHEED MILAT ROAD / KHALID BIN WALID ROAD (MEDICARE)
10	SHAHEED MILAT ROAD / TARIQ ROAD (M.CHOWRANGI)	10	SHAHEED MILAT ROAD / TARIQ ROAD (M.CHOWRANGI)
11	SHAHEED-E-MILLAT ROAD / SIRAJ -UD-DAULA ROAD	11	SHAHEED-E-MILLAT ROAD / SIRAJ -UD-DAULA ROAD
12	NATIONAL STADIUM / PIR SIBGHATULLAH ROAD	12	NATIONAL STADIUM / PIR SIBGHATULLAH ROAD
13	RUB HOSPITAL GULSHAN / SHABBIR USMANI ROAD	13	RUB HOSPITAL GULSHAN / SHABBIR USMANI ROAD
14	YASEEN ABAD / SHABBIR USMANI ROAD	14	YASEEN ABAD / SHABBIR USMANI ROAD
15	SHAHEED-E-MILLAT ROAD/ TIPU SULTAN ROAD	15	ABDULLAH HAROON ROAD /CUB ROAD (HOTEL METROPOLE)
16	JOHAR CHOWRANGI/HAFEEZ JALHANDRI ROAD	16	II CHNDRIGAR ROAD /M.R.KIYANI RD/DR.ZIAUDDIN ROAD(SHAHEEN COMPLEX)
17	DISCO BAKERY GULSHAN/SHABBIR USMANI ROAD	17	NAVY GATE / HIR ROAD
18	GHANI CHOWRANGI /ESTATE AVENUE	18	JAMSHED ROAD / MUFTI AHMED UR REHMAN ROAD (BANORIA CHOWK)
19	SHARFABAD / ALAMGIR ROAD	19	SADDAR DAWAKHANA
		20	RIATA PLOT SHAH FAISAL COLONY
		21	SOLDIER BAZAR
		22	LOVE LANE INTERSECTION / NISHTER ROAD

(25)

		23	BANK AL-FALAH / I.I.CHUNDRIGAR ROAD
		24	NBP HEAD OFFICE / I.I.CHUNDRIGAR ROAD
		25	HBL PLAZA / I.I.CHUNDRIGAR ROAD
		26	UNI TOWER / I.I.CHUNDRIGAR ROAD
		27	TIDAL FLOW SYSTEM AT I.I.CHUNDRIGAR ROAD

SUMMARY OF 45 INTERSECTIONS IN KARACHI

INSTALLATION OF SIGNALS (NEW INTERSECTIONS)

S.NO	NAME OF INTERSECTION	ORIGINAL PC-I SIGNALS WORK AMOUNT	REVISE PC-I SIGNALS WORK AMOUNT	Page No	ORIGINAL PC-I CIVIL WORK AMOUNT	Page No	REVISE PC-I CIVIL WORK
	SHAMA SHOPPING CENTRE / UNIVERSITY ROAD	1284250			1763571		
	JOUHAR MOUR / RASHID MINHAS ROAD	1284250			1763571		
	R.D.CHOWK /SITE AVENUE	2572400			1763571		
	MIRAN NAKA /MIRZA ADAM KHAN ROAD	2572400			1763571		
	ICI CHOWK/G,ALLANA ROAD (OLD MARIPUR ROAD	2572400			1763571		
	PMTF CROSSING/NATIONAL HIGHWAY	1472950			1763571		
1	PORT QASIM CROSSING/NATIONAL HIGHWAY	1472950	2834810	124-126	1763571	178	1939022
2	TOWNSHIP CROSSING/NATIONAL HIGHWAY	1472950	2430870	127-129	1763571	179	2615187
3	SHAH JAHAN AVENUE / SAMNABAD ROAD (GULBERG CHOWRANGI F.B.AREA)		2770503	130-132		180	4071137
4	SHAHRAH-E-JAHANGIR / ZIAUDDIN ROAD (TAHIR VILLA CHOWRANGI F.B.AREA)		2739115	133-135		181	6830601
5	SHAHRAH-E-JAHANGIR / AZIZABAD ROAD (COMPREHENSIVE SCHOOL F.B.AREA)		3340503	136-138		182	6518229
6	TIPU SULTAN INTERSECTION / SHAHEED-E-MILLAT ROAD (UNDER FLY OVER)		2807039	139-141			NIL
7	HABIB INTERSECTION / TEXTILE AVENUE SITE	2572400	3111210	142-144	1763571	183	3659504
8	MODEL COLONY GRAVEYARD / JINNAH AVENUE	1472950	2300660	145-147	1763571	184	4147146

27

S.NO	NAME OF INTERSECTION	ORIGINAL PC-I SIGNALS WORK AMOUNT	REVISE PC-I SIGNALS WORK AMOUNT	Page No	ORIGINAL PC-I CIVIL WORK AMOUNT	Page No	REVISE PC-I CIVIL WORK
9	MANZIL PETROL PUMP CROSSING / NATIONAL HIGHWAY	1472950	2587650	148-150	1763571	185	2100790
10	M.A.JINNAH ROAD / I.I.CHUNDRIGAR ROAD (TOWER)		2168930	151-153		186	713796
11	GULZAR-E-HIJRI CHOWK / PS SOHRAB GOTH		3017190	154-156		187	774265
12	JAHANGIR ROAD / CLAYTON ROAD / M.A.JINNAH ROAD (GRUMANDIR)		4142470	157-159			NIL
13	SAHBA AKHTAR ROAD / SHAHRAH-E- AL QUDS (MOUCHI MOUR)		2704890	160-162		188	250160
14	ABUL ASAR HAFEEZ JALANDHARI ROAD / KAMRAN CHOWRANGI GULISTAN-E-JAUHAR		3164695	163-165		189	332332
15	ABUL ASAR HAFEEZ JALANDHARI ROAD / MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR		3172680	166-168		190	542562
16	MAI KOLACHI ROAD / NLC CUT		2800030	169-171			NIL
17	NASIR JUMP KORANGI 12000 ROAD		2482960	172-174		191	608044
18	KORANGI NO-4 KORANGI 12000 ROAD		2377130	175-177	19399281	192	764212
		20222850	**50953335**		**19399281**		**35866987**

28

UP-GRADATION OF SIGNALS IN KARACHI

S.NO	NAME OF INTERSECTION	ORIGINAL PC-I SIGNALS WORK AMOUNT	REVISE PC-I SIGNALS WORK AMOUNT	Page No	ORIGINAL PC-I CIVIL WORK AMOUNT	Page No	REVISE PC-I CIVIL WORK
1	KHAYABAN-E-JAMI/KHAYABAN-E-SADDI (BOAT BASIN)	3081950	1650870	57-58	N/A		
2	KHAYABAN-E-IQBAL / CHARTERED ACCOUNTANTS AVENUE (THREE SWORDS)	2158850	1949000	59	N/A		
3	CH.KHALIQ-UZ-ZAMAN ROAD / CHARTERED ACCOUNTANTS AVENUE (RACE COURSE)	2065850	542000	60	N/A		
4	CH. KHALIQ UZZAM / LILLY BRIDGE ROAD	2099850	626000	61	N/A		
5	CHAND BIBI BRIDGE / CSD / KALA PUL	2099850	567000	62	N/A		
6	HOSHANG ROAD / ZIAUDDIN AHMED ROAD	2099850	639000	63	N/A		
7	HOSHANG ROAD/ ABDULLAH HAROON ROAD	2099850	578000	64	N/A		
8	DR. ZIAUDDIN AHMED ROAD / M.T.KHAN ROAD / CLUB ROAD (PIDC)	2158850	650000	65	N/A		
9	SHAHEED MILAT ROAD / KHALID BIN WALID ROAD (MEDICARE)	2158850	1950000	66	N/A		
10	SHAHEED MILAT ROAD / TARIQ ROAD (M.CHOWRANGI)	2158850	1282000	67	N/A		
11	SHAHEED-E-MILLAT ROAD / SIRAJ -UD-DAULA ROAD	2158850	2004000	68	N/A		
12	NATIONAL STADIUM / PIR SIBGHATULLAH ROAD	2158850	672000	69	N/A		

29

S.NO	NAME OF INTERSECTION	ORIGINAL PC-I SIGNALS WORK AMOUNT	REVISE PC-I SIGNALS WORK AMOUNT	Page No	ORIGINAL PC-I CIVIL WORK AMOUNT	Page No	REVISE PC-I CIVIL WORK
13	RUB HOSPITAL GULSHAN / SHABBIR USMANI ROAD	2158850	928000	70	N/A		
14	YASEEN ABAD / SHABBIR USMANI ROAD	2158850	1603350	71	N/A		
15	ABDULLAH HAROON ROAD / CLUB ROAD (HOTEL METROPOLE)		458000	72	N/A		
16	I.I.CHUNDRIGAR ROAD / M.R.KIYANI RD / DR.ZIAUDDIN ROAD (SHAHEEN COMPLEX)		1493250	73-74	N/A		
17	NAVY GATE / HIR ROAD		351000	75	N/A		
18	JAMSHED ROAD / MUFTI AHMED UR REHMAN ROAD (BANORIA CHOWK)		1455500	76	N/A		
19	SADDAR RAWAKHANA		1588310	77-78	N/A	93	448600
	SHAHEED-E-MILLAT ROAD/ TIPU SULTAN ROAD	2158850			N/A		
	JOHAR CHOWRANGI/HAFEEZ JALHANDRI ROAD	2308850			N/A		
	DISCO BAKERY GULSHAN/SHABBIR USMANI ROAD	2158850			N/A		
	GHANI CHOWRANGI /ESTATE AVENUE	2158850			N/A		
	SHARFABAD / ALAMGIR ROAD	2158850			N/A		
20	RAITA PLOT SHAH FAISAL COLONY		2660350	79-80	N/A	94	448600
21	SOLDIER BAZAR		1938930	81-82	N/A	95	448600
22	LOVE LANE INTERSECTION / NISHTER ROAD		826000	83	N/A		
23	BANK AL-FALAH / I.I.CHUNDRIGAR ROAD		1704800	84-85	N/A		
24	NBP HEAD OFFICE / I.I.CHUNDRIGAR ROAD		1704800	86-87	N/A		
25	HBL PLAZA / I.I.CHUNDRIGAR ROAD		1816750	88-89	N/A		
26	UNI TOWER / I.I.CHUNDRIGAR ROAD		1699600	90-91	N/A		
27	TIDAL FLOW SYSTEM AT I.I.CHUNDRIGAR ROAD		10026050	92	N/A		
	TOTAL	**41762250**	**43364560**		**0**		**1345800**

30

FOR SIGNALS IN KARACHI		
DISCRIPTION OF KARACHI WORK	ORIGINAL PC-I COST	REVISE PC-I COST
AMOUNT OF NEW INSTALLATION OF SIGNALIZATION WORK	20222850	50953335
AMOUNT OF UP-GRADATION OF SIGNALIZATION WORK	41762250	43364560
AMOUNT OF CIVIL WORK NEW SIGNALS	19399281	35866987
AMOUNT OF CIVIL WORK UP-GRADATION OF SIGNALS		1345800
CONTROL ROOM FOR VISUAL MONITORING	5000000	
TOTAL AMOUNT OF WORK		
TOTAL COST	86384381	131530682

31

Handing/Taking Over Certificates Up-gradation of Traffic Signals at Karachi

No. SMTA/INFRA/SIG/2019/1684
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/, 2019

To,

The Senior Director,
Traffic Engineering Bureau,
Karachi development Authority,
Karachi.

SUBJECT: HANDING OVER OF THE INSTALLATION/UP-GRADATION WORK OF TRAFFIC SIGNALS IN KARACHI.

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority (SMTA) has undertaken the Installation and Up-gradation of traffic signals work in Karachi including other districts of Sindh under ADP Scheme No.1902 to solve traffic regulatory issues including traffic congestion.

2. In this regard M/s Silicon Communication Security JV Ghause Builders (Selected through Competitive Bidding Process) has completed the Installation of New Traffic Signals and up-gradation of existing traffic signals at Karachi on as per given specifications. Following Up –gradation intersection/signals were installed by SMTA are being handed over to the Senior Director, (Traffic Engineering Bureau), KDA, Karachi.

Inventory of the UP- Gradation traffic signals systems is attached at **(Annexure-"A")**

Sr. No.	Up gradation 18 number of Traffic Signals at following locations at Karachi completed by Sindh Mass Transit Authority, Government of Sindh.
1	TEEN TALWAR CLIFTON
2	RACE COURSE
3	CHAND BIBI BRIDGE / KALA PUL
4	LILLY BRIDGE / KALA PUL
5	HOSHANHG ROAD/ZIAUDDIN AHMED
6	HOSHANHG ROAD/ABDULLAH HAROON ROAD
7	PIDC
8	MEDICARE

9	TARIQ ROAD (M.CHOWRANGI)
10	SIRAJ-UD-DAULA ROAD
11	METRO POLE HOTEL
12	NATIONAL STADIUM
13	RUB HOSPITAL GULSHAN-E-IQBAL
14	NAVY GATE KARSAZ
15	JAMSHED ROAD/BANORIA CHOWK
16	YASEEN ABAD
17	BOAT BASIN
18	SHAHEEN COMPLEX II CHUNDIGAR ROAD (TIDEL FLOW)

3. Please Confirm taking over the Up-gradation traffic Signals of the above mention location for the purpose of record no liability is pending with SMTA on the same.

EXECUTIVE ENGINEER,
SINDH MASS TRANSIT AUTHORITY,
GOVERNMENT OF SINDH

Copy to:

1. Managing Director, SMTA.
2. The Director Infrastructure / Project, SMTA.
3. Director Admin & HR SMTA.
4. PS to Secretary Transport & Mass Transit Department, GoS.
5. Master File.

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 31/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF TEEN TALWAR

DETAIL OF EQUIPMENT

DUAL COLOUR COUNT DOWN TIMER 300 MM.	07 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	23 NOS
2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM	12 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
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Government of Sindh

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SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF TARIQ ROAD (M. CHOWRANGI)

DETAIL OF EQUIPMENT

DUAL COLOUR COUNT DOWN TIMER 300 MM	08 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	18 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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Karachi, dated 30/01/2019

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF BOAT BASIN

DETAIL OF EQUIPMENT

Item	Quantity
PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM	340 P/R.M
PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD	01 NO
SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY	60 P/R.M
INSTALLATION OF STANDARD POLE 12 FT	04 NOS
INSTALLATION OF MAST ARM POLE	06 NOS
CONSTRUCTION OF STANDARD POLE FOUNDATION	04 NOS
CONSTRUCTION OF MAST ARM POLE FOUNDATION	06 NOS
PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE	02 NOS
PROVIDING & LAYING POWER CABLE 3 CORE 6MM	200 P/R.M
DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	10 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM	06 NOS

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF CH. KHALIQUZZAM. LILLY BRIDGE ROAD

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	38 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF CHAND BIBI BRIDEGE/KALA PUL

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	03 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	08 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF II CHUNDIGAR ROAD/SHAHEEN COMPLEX

DETAIL OF EQUIPMENT

PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM	300 P/R.M
PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD	01 NO
SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY	50 P/R.M
INSTALLATION OF STANDARD POLE 12 FT	01 NO
CONSTRUCTION OF STANDARD POLE FOUNDATION	01 NO
PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER	02 NOS
PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30 P/R.M
DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	05 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	13 NOS
1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM	04 NOS

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF CH. KHALIQUZZAMAN/ RACE CORSE

DETAIL OF EQUIPMENT

Item	Quantity
DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	31 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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42.

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TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF NATIONAL STADIUM/PIR SIBGHATULLAH ROAD

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	06 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	36 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF NAVY GATE KARSAZ

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	03 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	18 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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44

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF CLUB ROAD PIDC

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	40 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

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GOVERNMENT OF SINDH

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Transport & Mass Transit Department
Government of Sindh

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45

GOVERNMENT OF SINDH
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SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF ABDULLAH HAROON ROAD/ CLUB ROAD/ HOTEL METRO POLE

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	24 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	1 NO

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SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 20/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF JAMSHAD ROAD BANORIA CHOWK

DETAIL OF EQUIPMENT

PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM	80 P/R.M
PROVIDING & LAYING POWER CABLE 3 CORE 6MM	10 R.M
DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	11 NOS
2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM	12 NOS
1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM	02 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department,
Government of Sindh

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GOVERNMENT OF SINDH

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SILICON COMMUNICATION & SECURITY * Gr. Builders * JV

SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

47

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION:	UP-GRADATION OF HOSHANG ROAD/ ABDULLAH HAROON ROAD

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	04 NOS
PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE	34 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

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SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

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SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

48

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF RUB HOSPITAL GULSHAN

DETAIL OF EQUIPMENT

3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM	02 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	12 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

HANDOVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

TAKEOVER
TRAFFIC ENGINEERING BUREAU
KDA, KARACHI

SILICON COMMUNICATION & SECURITY

SILICON COMMUNATION & SECUTARY

DATED.. 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF HOSHANG ROAD/ZIAUDDIN AHMED ROAD

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	03 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	09 NOS
1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM	01 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NOS

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

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GOVERNMENT OF SINDH

TAKEOVER
TRAFFIC ENGINEERING BUREAU
KDA, KARACHI

SILICON COMMUNICATION & SECURITY JV

SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF KHALID BIN WALEED ROAD MADICARE

DETAIL OF EQUIPMENT

DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	06 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	21 NOS
2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM	16 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

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GOVERNMENT OF SINDH

TAKEOVER
TRAFFIC ENGINEERING BUREAU
KDA, KARACHI

SILICON COMMUNICATION & SECURITY In-house Builders — JV

SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF SHAHEED -E- MILLAT ROAD SIRAJ – UD-DAULA ROAD

DETAIL OF EQUIPMENT

DUAL COLOUR COUNT DOWN TIMER 300 MM	06 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	22 NOS
2-WAY TRAFFIC LIGHT (RED + GREEN) 200 MM	16 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

HANDOVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

TAKEOVER
TRAFFIC ENGINEERING BUREAU
KDA, KARACHI

SILICON COMMUNICATION & SECURITY + Ghouse Builders JV.

SILICON COMMUNATION & SECUTARY

DATED: 31/01/2019

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated 30/01/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	UP-GRADATION OF SHABBIR USMANI ROAD/YASEENABAD

DETAIL OF EQUIPMENT

PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM	25 P/R.M
INSTALLATION OF STANDARD POLE 12 FT	02 NOS
CONSTRUCTION OF STANDARD POLE FOUNDATION	02 NOS
DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM	05 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM	13 NOS
2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM	11 NOS
1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM	04 NOS
3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM	03 NOS
PREPARATION OF INTERSECTION SPECIFICATION (IS)	01 NO

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

HANDOVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

TAKEOVER
TRAFFIC ENGINEERING BUREAU
KDA, KARACHI

SILICON COMMUNICATION & SECURITY JV SG Builders

SILICON COMMUNATION & SECUTARY

DATED. 31/01/2019

52/A

UP- GRADATION COST ESTIMATES IN KARACHI

REVISE COST ESTIMATES UP-GRADATION OF TRAFFIC SIGNALS

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	MONITORING ROOM PC-I3, 4.NOS, SERVER CORE I7, 01 .NO LED SCREEN 48 INCH 05 NOS. FURNITURE AND FIXTURES WITH GIE MAP.		5700000	NOS	
2	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED SIEMENS ST-950 SERIES OR EQUVELENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING SCOOT INTERFACE ENABLE ,CONTROLLER CASE ,CONTROLLER PLINTH.		1800000	NOS	0
3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		45000	NOS	0
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	55000	NOS	110000
5	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		29000	NOS	0
6	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		17000	NOS	0
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	3685	650	METER	2395250
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	16	9650	NOS	154400

REVISE COST ESTIMATES UP-GRADATION OF TRAFFIC SIGNALS

9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	570	3450	METER	1966500
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	430	747	METER	321210
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	31	1150	NOS	35650
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	38	9000	NOS	342000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	30	7400	NOS	222000
14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	38	15000	NOS	570000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	43	8600	NOS	369800
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	965	550	METER	530750
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	115	35000	NOS	4025000
18	LANE DEVICE AND MODEM		50000	NOS	0

REVISE COST ESTIMATES UP-GRADATION OF TRAFFIC SIGNALS

19	NET DEVICE WITH 12 MONTHS MONTHLY RENT		50000	NOS	0
20	FISH EYE CAMERA		120000	NOS	0
21	RG 45 CABLE FOR CAMERA		115	METER	0
22	PROVIDING & FIXING OF CONTROLLERS FOR TIDAL FLOW SYSTEM WITH GPS CLOCK TO BE SYNCHRONIZED IN TIME TO OPERATE THE LANE CONTROL LIGHTS.	7	350000	NOS	2450000
23	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY WITH TWO WAY ARROW CROSS LED MODULE (RED + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	112	18000	NOS	2016000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	221	12000	NOS	2652000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	231	54000	NOS	12474000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	99	36000	NOS	3564000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	22	18000	NOS	396000
E-4	PROVIDING & FIXING OFARROW CROSS SMD LIGHT (RED+GREEN) IN 450 MM DIAMETER POWDER COATED WEATHER PROVED METAL BODY		32000	NOS	0
E-5	PROVIDING & FIXING OF UPS 1000 WATTS SIGN WAVES				
E-6	PROVIDING & FIXING OF DRY BATTERY 100 AMP MAINTENANCE FREE				
E-7	PROVIDING & FIXING OF DISPLAY SIGN BOARD 4 FEET BY 2 FEET				
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	50	65000	NOS	3250000

REVISE COST ESTIMATES UP-GRADATION OF TRAFFIC SIGNALS

E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANC				
E-10	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.				
E-11	CONSULTANCY FOR IMPROVE OF TIME PLAN THROUGH DATA COLLECTION OF EACH INTERSECTION IN KARACHI, CHECKING SPECIFICATION AS PER BOQ FOR UP-GRADATION AND NEW INSTALLATION OF TRAFFIC SIGNALS IN KARACHI				
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	16	30000	NOS	480000
E-13	PROVIDING & FIXING OF GUIDE SIGN / INFORMATIVE SIGN ALUMINIUM PLATE AND REFLECTIVE PAPER DIAMOND GRADE	1120	4500	P/SFT	5040000
	TOTAL				**43364560**

57

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT BOAT BASIN

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	340	P/R.M	650	221000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	60	P/R.M	747	44820
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	1150	4600
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	6	EACH	9000	54000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	4	EACH	7400	29600
14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	6	EACH	15000	90000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	2	EACH	8600	17200
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	200	P/R.M	550	110000
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT BOAT BASIN

E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	EACH	54000	540000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	6	EACH	65000	390000
	TOTAL				**1650870**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT THREE SWORD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	7	EACH	35000	245000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	23	EACH	54000	1242000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	36000	432000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**1949000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT RACE COURSE

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	31	EACH	12000	372000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**542000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT LILLY BRIDGE

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	38	EACH	12000	456000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**626000**

62

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT CHAND BIBI

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	EACH	35000	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	EACH	54000	432000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**567000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT HOSHANG KMC

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	EACH	35000	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	9	EACH	54000	486000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	EACH	18000	18000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**639000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT HOSHANG ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	34	EACH	12000	408000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**578000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT PIDC

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	40	EACH	12000	480000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**650000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT MEDICARE

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	6	EACH	35000	210000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	21	EACH	54000	1134000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**1950000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT M-CHOWRANGI

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	8	EACH	35000	280000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	18	EACH	54000	972000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**1282000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT SIRAJUDDULAH

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	6	EACH	35000	210000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	22	EACH	54000	1188000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**2004000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT NATIONAL STADIUM

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	6	EACH	35000	210000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	36	EACH	12000	432000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**672000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT RUB MEDICAL

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	55000	110000
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**928000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT YASEENABAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	25	P/R.M	650	16250
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	1150	2300
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	2	EACH	7400	14800
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	5	EACH	35000	175000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	13	EACH	54000	702000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	11	EACH	36000	396000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	3	EACH	65000	195000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**1603350**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT METROPOLE

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	24	EACH	12000	288000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**458000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT SHAHEEN COMPLEX

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	300	P/R.M	650	195000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF standard POLE 12ft ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	1	EACH	1150	1150
13	CONSTRUCTION OF standard POLE FOUNDATION AS PER DRAWING	1	EACH	7400	7400
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	2	EACH	8600	17200
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30	P/R.M	550	16500
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	5	EACH	35000	175000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	13	EACH	54000	702000

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT SHAHEEN COMPLEX

E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	4	EACH	65000	260000
	TOTAL				**1493250**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT KASAZ NAVY GATE

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	EACH	35000	105000
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	18	EACH	12000	216000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**351000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT BANORIA

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	80	P/R.M	650	52000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	10	O/R.M	550	5500
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	11	EACH	54000	594000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	36000	432000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	2	EACH	65000	130000
E-12	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
	TOTAL				**1455500**

ESTIMATE UP-GRADATION OF SADDAR DAWAKHANA

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	100	P/R.M	650	65000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	70	P/R.M	3450	241500
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	30	P/R.M	747	22410
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	3	EACH	1150	3450
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	5	EACH	9000	45000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	2	EACH	7400	14800

ESTIMATE UP-GRADATION OF SADDAR DAWAKHANA

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	5	EACH	15000	75000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	P/R.M	550	27500
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	EACH	54000	432000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	36000	144000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	5	EACH	65000	325000
	TOTAL				**1588310**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT RAITA PLOT SHAH FAISAL

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	600	P/R.M	650	390000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	120	P/R.M	3450	414000
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	4	EACH	9000	36000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT RAITA PLOT SHAH FAISAL

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	75	P/R.M	550	41250
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	36000	432000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	4	EACH	65000	260000
	TOTAL				**2660350**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT SOLDIER BAZAR

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	450	P/R.M	650	292500
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	110	P/R.M	3450	379500
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	40	P/R.M	747	29880
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	4	EACH	9000	36000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT SOLDIER BAZAR

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30	P/R.M	550	16500
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	EACH	54000	540000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	4	EACH	65000	260000
	TOTAL				**1938930**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT LOVE LANE/ NISHTER ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	200	P/R.M	650	130000
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	EACH	35000	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	7	EACH	54000	378000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	EACH	18000	18000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	3	EACH	65000	195000
	TOTAL				**826000**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT BANK AL FALAH I.I.CHUNDRIGAR ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	320	P/R.M	650	208000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	60	P/R.M	3450	207000
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	1	EACH	1150	1150
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	5	EACH	9000	45000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	1	EACH	7400	7400

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT BANK AL FALAH I.I.CHUNDRIGAR ROAD

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	5	EACH	15000	75000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	55	P/R.M	550	30250
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	EACH	54000	432000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	36000	144000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	5	EACH	65000	325000
	TOTAL				**1704800**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT NBP HEAD OFFICE I.I.CHUNDRIGAR ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	320	P/R.M	650	208000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	60	P/R.M	3450	207000
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	1	EACH	1150	1150
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	5	EACH	9000	45000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	1	EACH	7400	7400

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT NBP HEAD OFFICE I.I.CHUNDRIGAR ROAD

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	5	EACH	15000	75000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	55	P/R.M	550	30250
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	EACH	54000	432000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	36000	144000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	5	EACH	65000	325000
	TOTAL				**1704800**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT HBL PLAZA I.I.CHUNDRIGAR ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	300	P/R.M	650	195000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	80	P/R.M	3450	276000
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	5	EACH	1150	5750
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	4	EACH	9000	36000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	5	EACH	7400	37000

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT HBL PLAZA I.I.CHUNDRIGAR ROAD

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	60	P/R.M	550	33000
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	EACH	54000	540000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	36000	144000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	4	EACH	65000	260000
	TOTAL				**1816750**

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT UNI TOWER I.I.CHUNDRIGAR ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	250	P/R.M	650	162500
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	1	EACH	9650	9650
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	70	P/R.M	3450	241500
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	50	P/R.M	747	37350
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	1150	2300
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	5	EACH	9000	45000
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	2	EACH	7400	14800

ESTIMATE UP-GRADATION OF TRAFFIC SIGNAL AT UNI TOWER I.I.CHUNDRIGAR ROAD

14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	5	EACH	15000	75000
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	P/R.M	550	27500
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	EACH	54000	432000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	36000	144000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE	5	EACH	65000	325000
	TOTAL				**1699600**

ESTIMATE UP-GRADATION OF TIDAL FLOW SYSTEM AT I.I.CHUNDRIGAR ROAD

S.NO	ITEM	QTY	UNIT	RATE	AMOUNT
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	400	P/R.M	650	260000
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1-CIRCUIT BREAKER SINGLE PHASE 2-VOLT METER, SINGLE PHASE (IMPORTED) APROVED MAKE AND DESIGN 3-INDICATION LAMP	7	EACH	9650	67550
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	350	P/R.M	550	192500
22	PROVIDING & FIXING OF CONTROLLERS FOR TIDAL FLOW SYSTEM WITH GPS CLOCK TO BE SYNCHRONIZED IN TIME TO OPERATE THE LANE CONTROL LIGHTS.	7	EACH	350000	2450000
23	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY WITH TWO WAY ARROW CROSS LED MODULE (RED + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	112	EACH	18000	2016000
E-13	PROVIDING & FIXING OF GUIDE SIGNS/INFORMATIVE SIGN ALUMINUM PLATE AND REFLECTIVE PAPER DIAMOND GRADE	1120	P/SFT	4500	5040000
	TOTAL				**10026050**

92/A

UP- GRADATION

CIVIL WORKS

COST ESTIMATES

IN

KARACHI

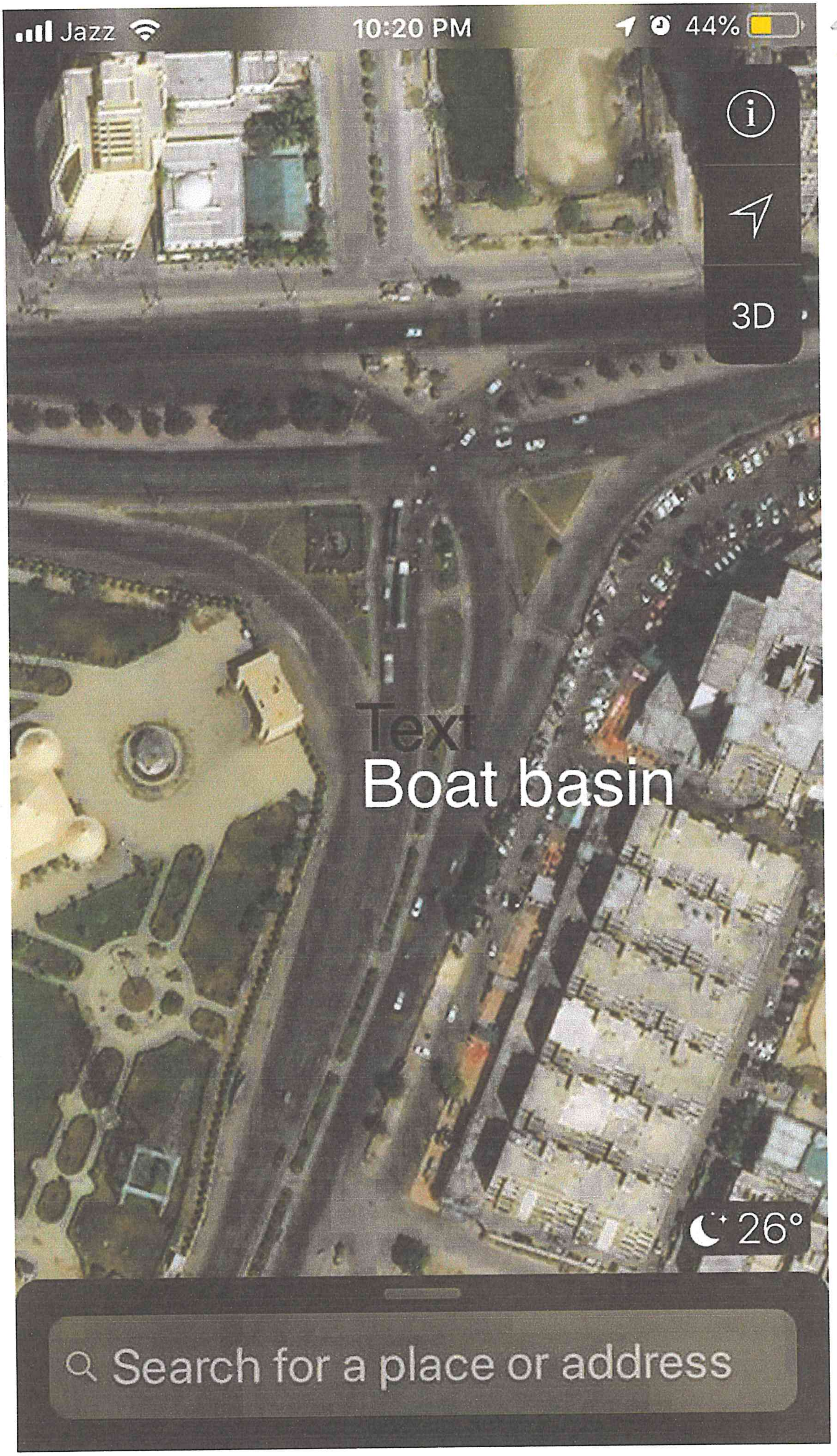
CIVIL WORK ESTIMATE FOR SADDAR DAWAKHANA

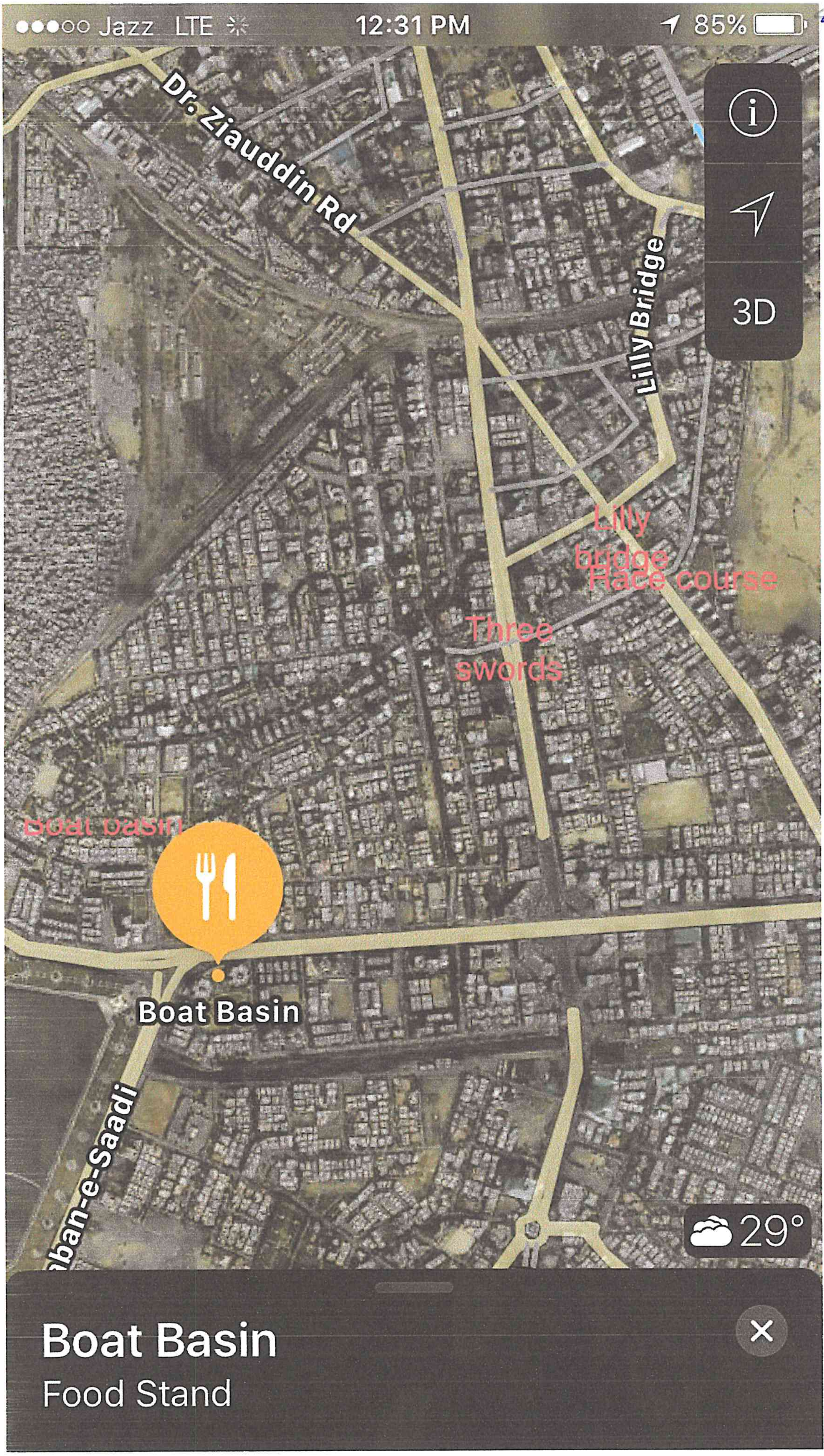
S. No	ITEM	Unit	QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	750	22.23	**16,672.50**
2	P/F **PRECAST KERB**	Rft	500	297.01	**148,505.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1500	1200.2	**18,003.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
6	Preparing **sub grade**	SFt		5.2628	-
7	P/L **sub base** Etc	CFt		33.4171	-
8	P/L **Aggregate base course** Etc	CFt	1000	55.4224	**55,422.40**
9	**Painting** with enamel paint of approved quality	SFt	1000	21.1641	**21,164.10**
10	P/I **Pavement marking 2mm Thick**	SFt		117	-
11	Supplying and fixing of **reflectorize** road studs	Each		596.23	-
12	Providing and spraying **Prime Coat**	Sft		14.29	-
13	Applying **TACK Coat**	Sft	1000	9.54	**9,540.00**
14	**2" (5O mm) Thick Asphalt**	Sft	1000	82.747	**82,747.00**
				TOTAL	**448,599.50**

CIVIL WORK ESTIMATE FOR RAITA PLOT SHAH FAISAL COLONY					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	750	22.23	**16,672.50**
2	P/F **PRECAST KERB**	Rft	500	297.01	**148,505.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1500	1200.2	**18,003.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
6	P/L **sub base** Etc	CFt		33.4171	-
7	P/L **Aggregate base course** Etc	CFt	1000	55.4224	**55,422.40**
8	**Painting** with enamel paint of approved quality	SFt	1000	21.1641	**21,164.10**
9	Applying **TACK Coat**	Sft	1000	9.54	**9,540.00**
10	**2" (5O mm) Thick Asphalt**	Sft	1000	82.747	**82,747.00**
			TOTAL AMOUNT		**448,599.50**

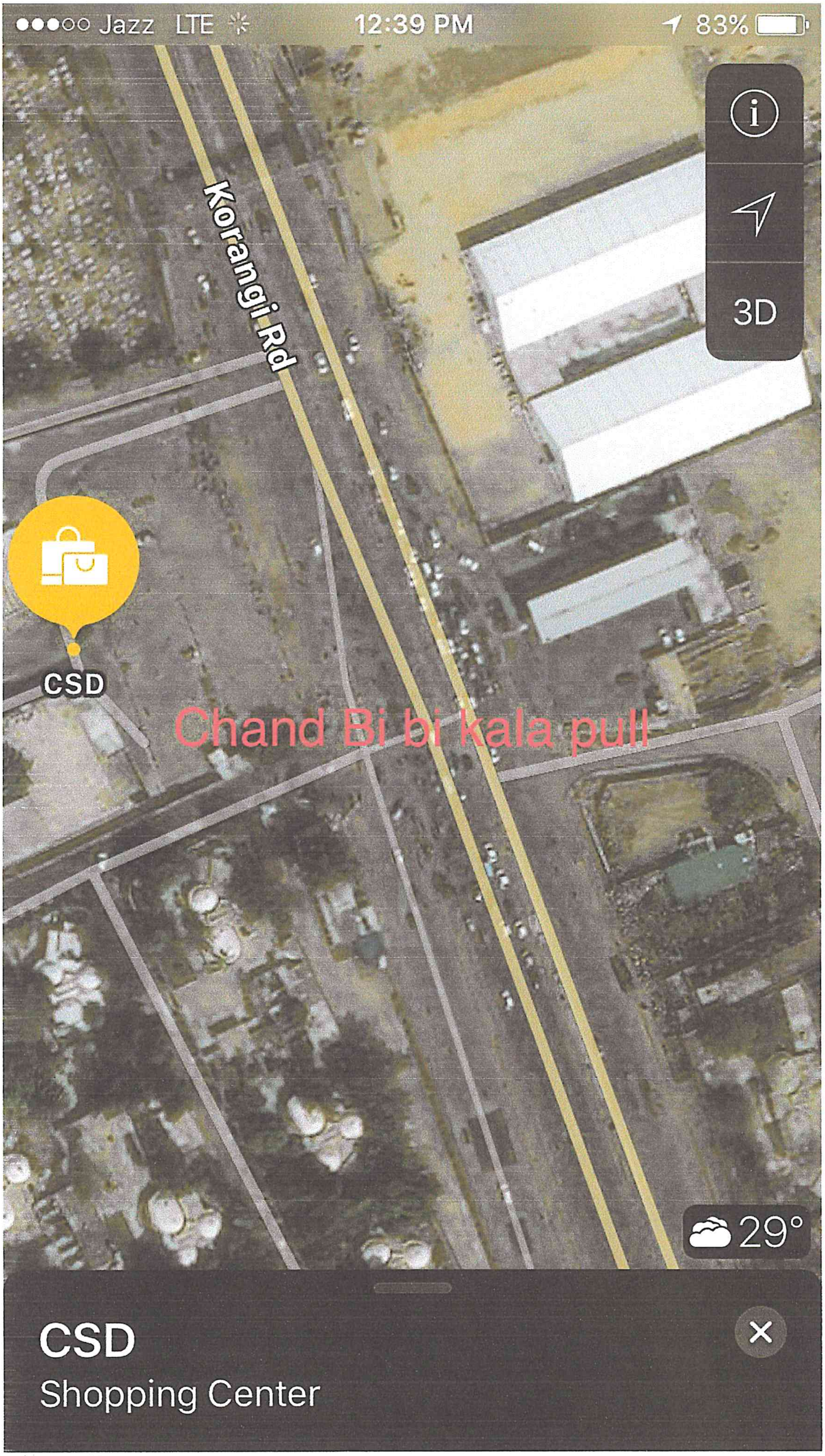
CIVIL WORK ESTIMATE FOR SOLDIER BAZAR					
S. No	**ITEM**	**Unit**	**TOTAL QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	750	22.23	**16,672.50**
2	P/F **PRECAST KERB**	Rft	500	297.01	**148,505.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1500	1200.2	**18,003.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
	P/L **Aggregate base course** Etc	CFt	1000	55.4224	**55,422.40**
6	**Painting** with enamel paint of approved quality	SFt	1000	21.1641	**21,164.10**
7	Applying **TACK Coat**	Sft	1000	9.54	**9,540.00**
8	**2" (5O mm) Thick Asphalt**	Sft	1000	82.747	**82,747.00**
			TOTAL AMOUNT		**448,599.50**

96

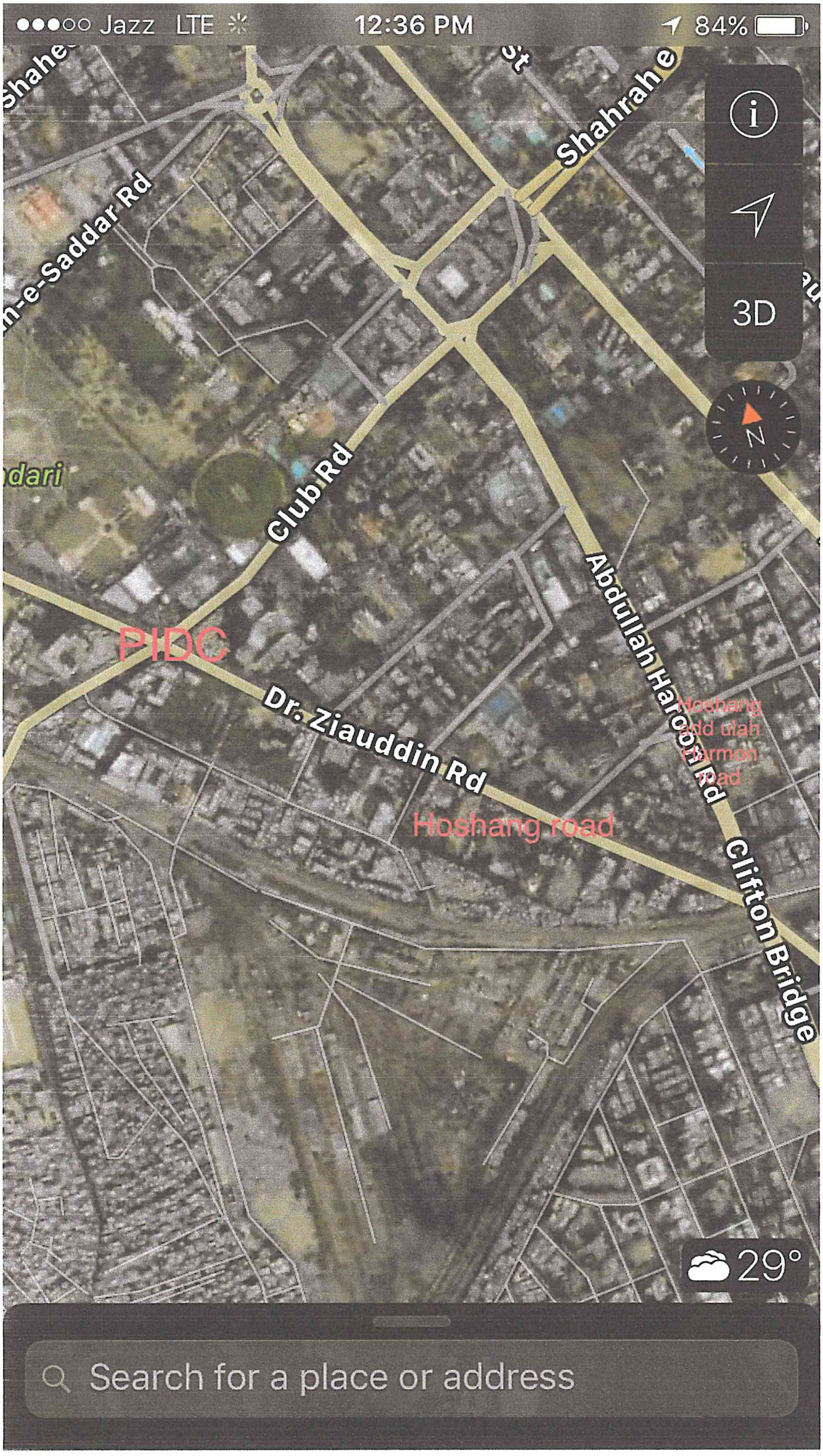

Jazz
10:20 PM
44%
3D
Text
Boat basin
26°
Search for a place or address


●●●○○ Jazz LTE
12:31 PM
85%
Dr. Ziauddin Rd
Lilly Bridge
3D
Lilly bridge
Race course
Three swords
Boat Basin
Boat Basin
29°
Boat Basin
Food Stand

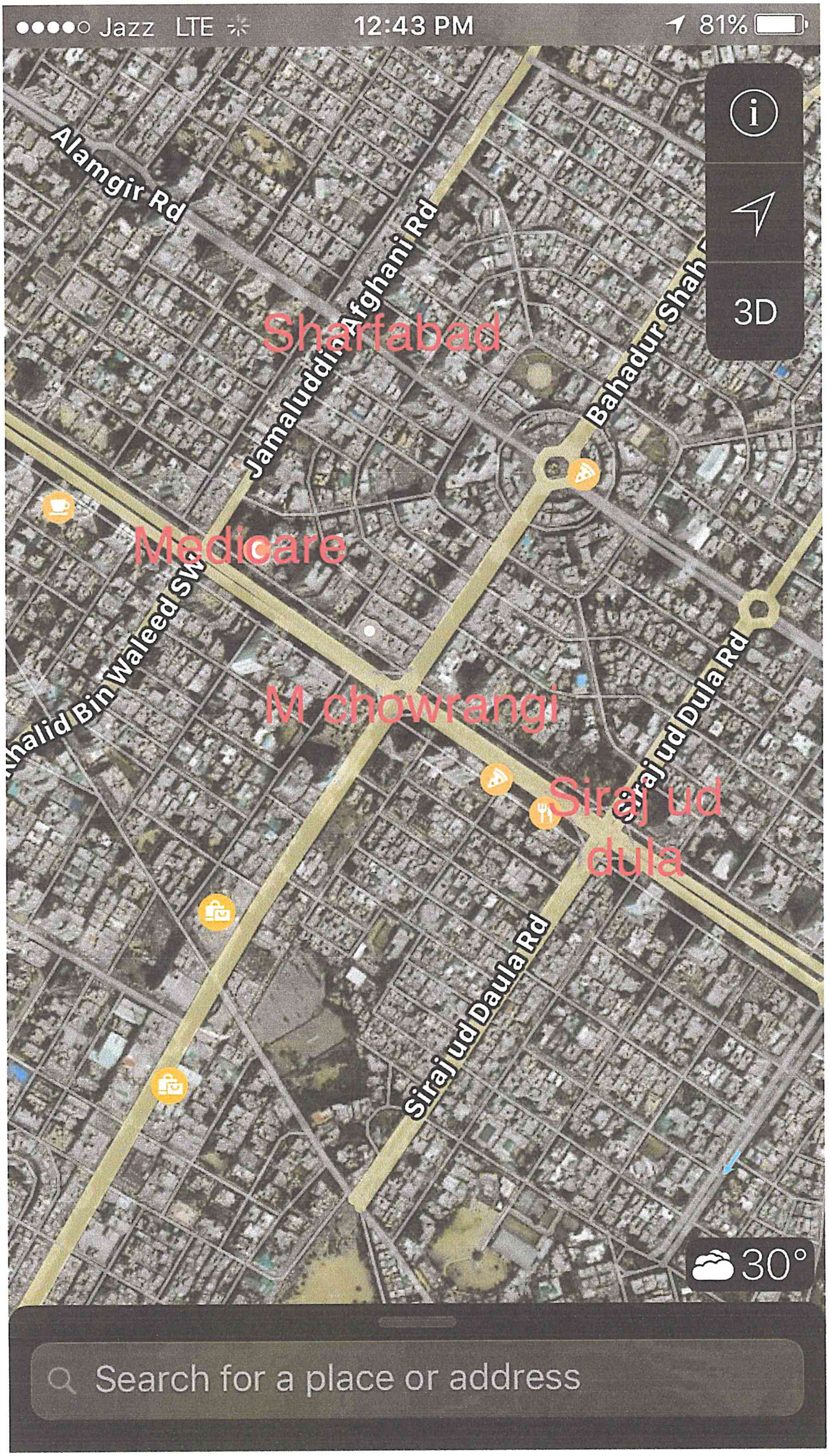
98



Jazz LTE
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83%
3D
Korangi Rd
CSD
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CSD
Shopping Center


Jazz LTE
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n-e-Saddar Rd
Club Rd
PIDC
Dr. Ziauddin Rd
Hoshang road
Abdullah Haroon Rd
Clifton Bridge
Hoshang add ulah Harmon road
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Search for a place or address

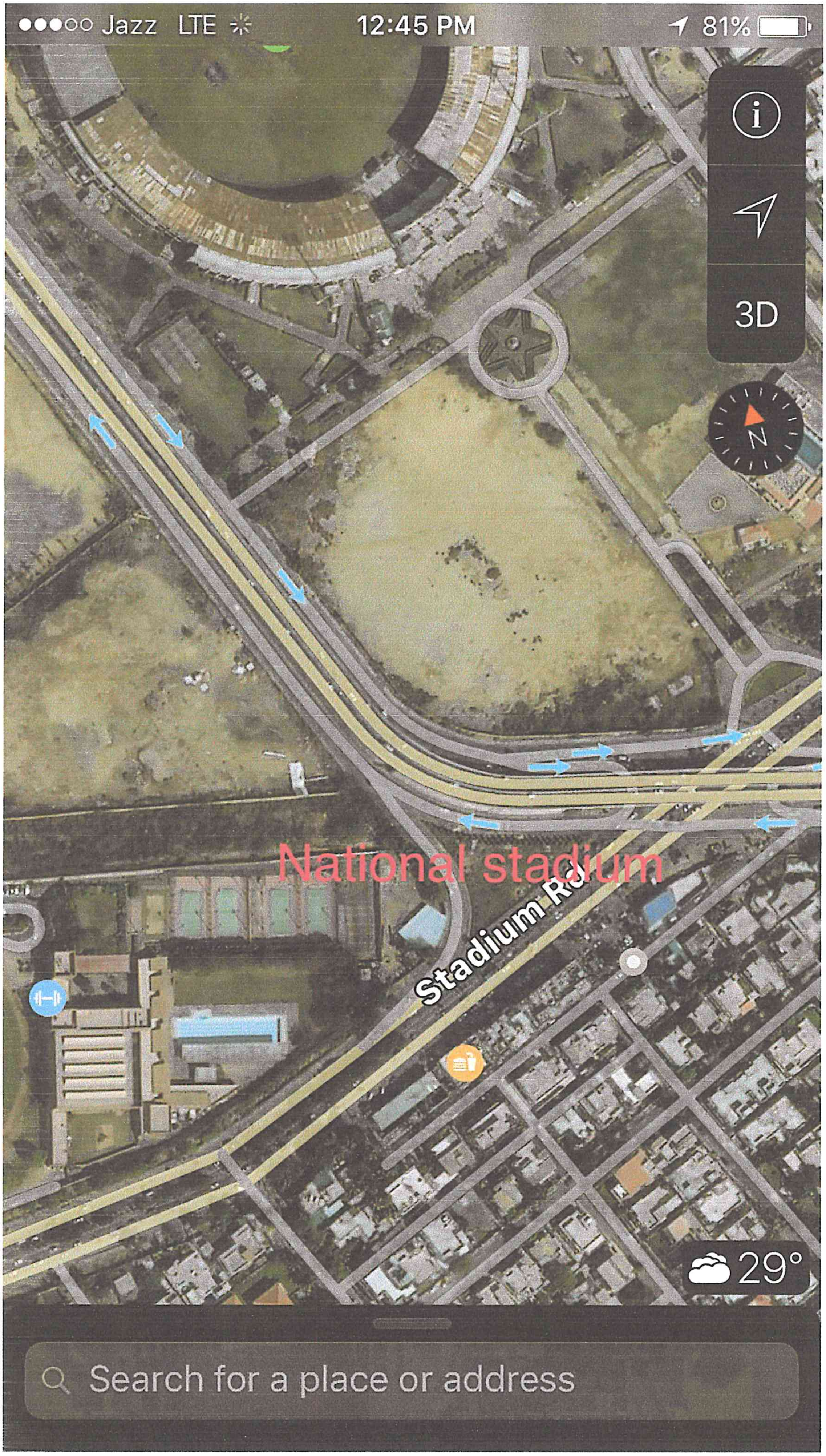
100



●●●●○ Jazz LTE
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81%
3D
Alamgir Rd
Jamaluddin Afghani Rd
Bahadur Shah
Sharfabad
Medicare
Khalid Bin Waleed SW
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Siraj ud dula
Siraj ud Daula Rd
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Jazz
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Metropole Hotel
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Jazz
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Complex
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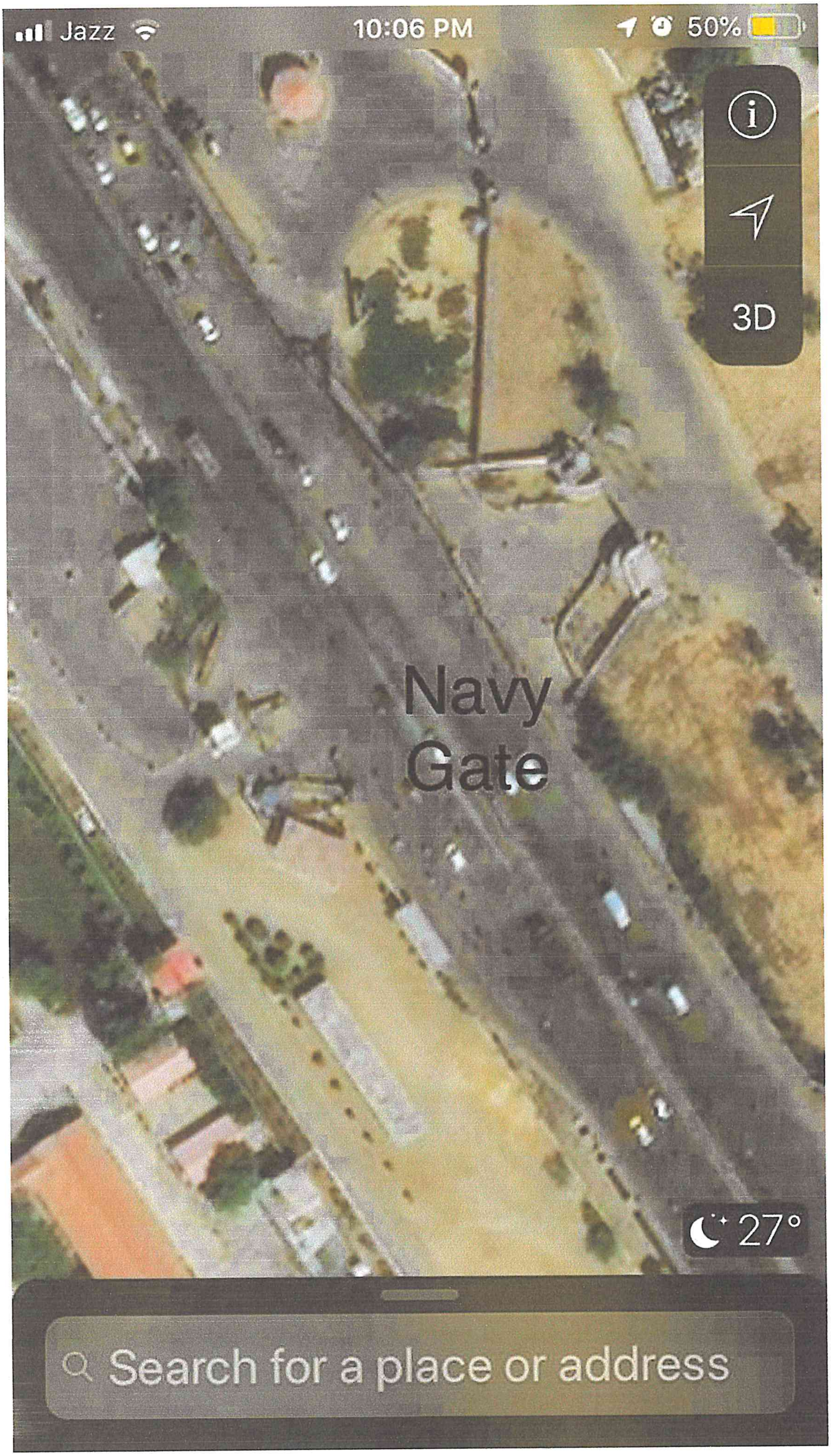

●●●○○ Jazz LTE
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National stadium
Stadium Rd
29°
Search for a place or address

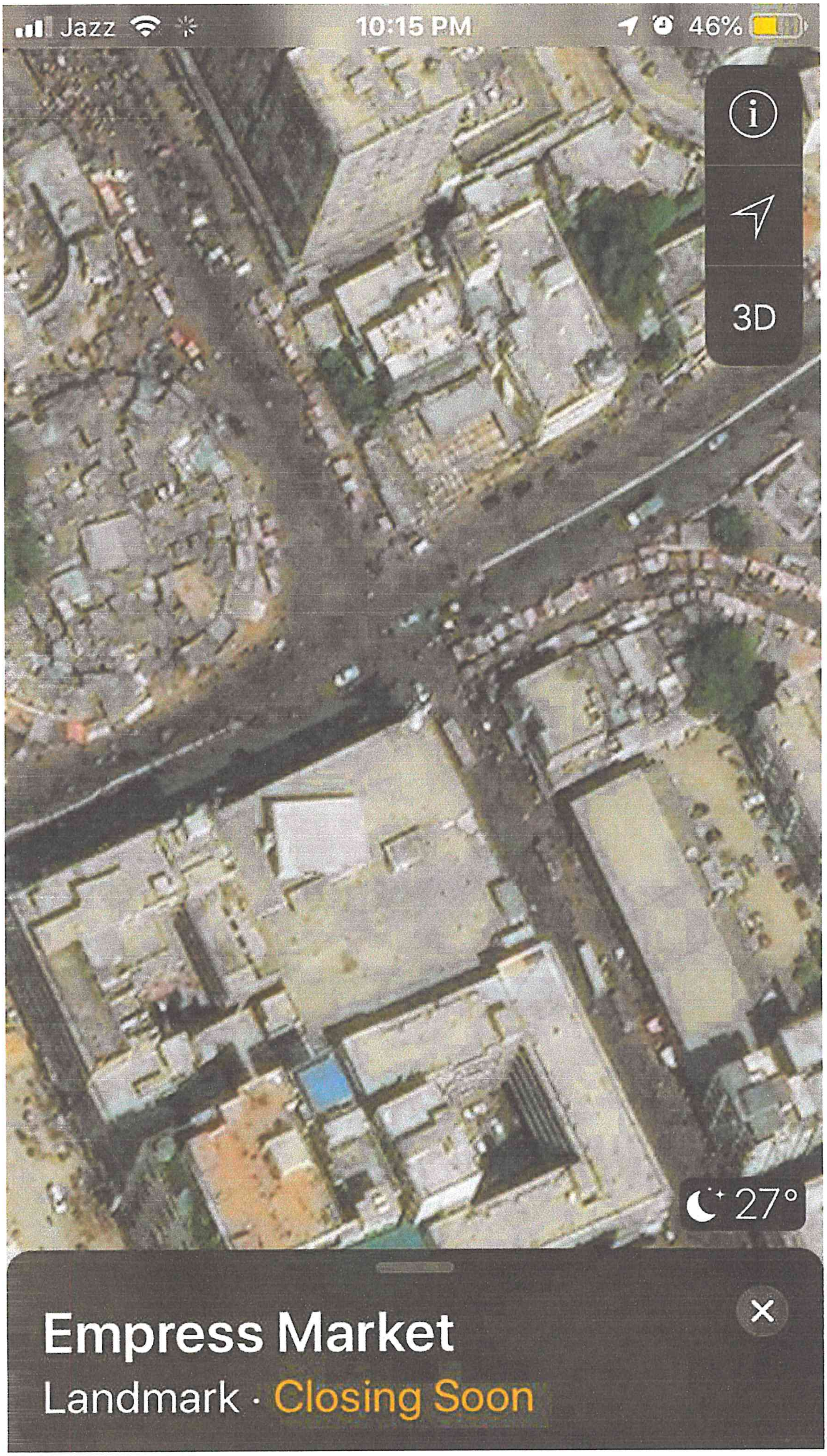
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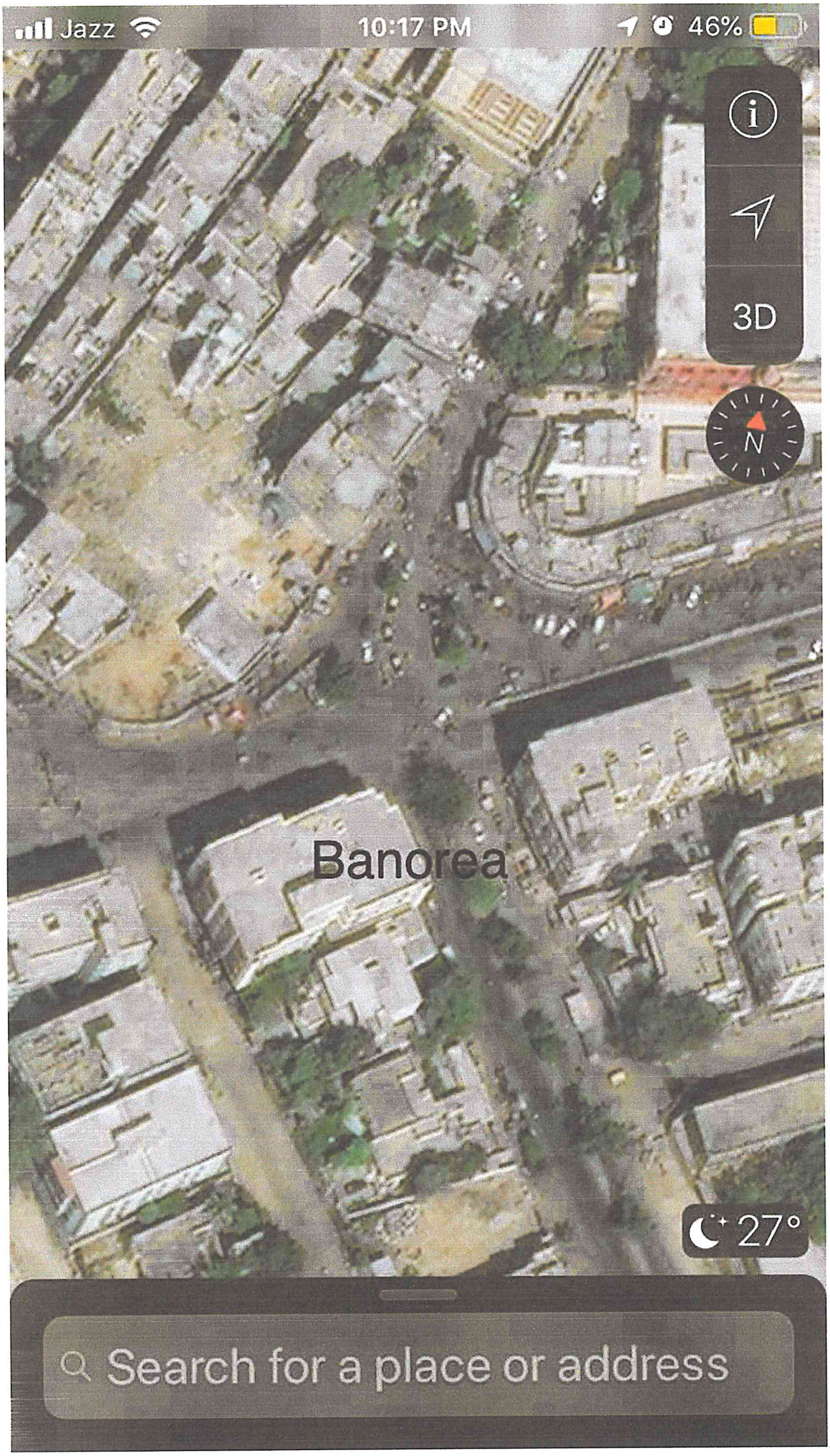


Jazz LTE
12:47 PM
80%
Shah Jahan Ave
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3D
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Umrao Tariq Rd
29°
Search for a place or address

105




Jazz
10:15 PM
46%
3D
27°
Empress Market
Landmark · Closing Soon


Jazz
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Search for a place or address

LIST OF NEW INSTALLED TRAFFIC SIGNALS IN KARACHI

LIST OF NEW TRAFFIC SIGNALS IN KARACHI

AS PER PC-I		AS PER REVISE PC-I	
S.NO	NAME OF INTERSECTION	S.NO	NAME OF INTERSECTION
1	SHAMA SHOPPING CENTRE / UNIVERSITY ROAD	1	PORT QASIM CROSSING/NATIONAL HIGHWAY
2	JOUHAR MOUR / RASHID MINHAS ROAD	2	TOWNSHIP CROSSING/NATIONAL HIGHWAY
3	R.D.CHOWK /SITE AVENUE	3	SHAH JAHAN AVENUE / SAMNABAD ROAD (GULBERG CHOWRANGI F.B.AREA)
4	MIRAN NAKA /MIRZA ADAM KHAN ROAD	4	SHAHRAH-E-JAHANGIR / ZIAUDDIN ROAD (TAHIR VILLA CHOWRANGI F.B.AREA)
5	ICI CHOWK/G,ALLANA ROAD (OLD MARIPUR ROAD	5	SHAHRAH-E-JAHANGIR / AZIZABAD ROAD (COMPREHENSIVE SCHOOL F.B.AREA)
6	PMTF CROSSING/NATIONAL HIGHWAY	6	TIPU SULTAN INTERSECTION / SHAHEED-E-MILLAT ROAD (UNDER FLY OVER)
7	PORT QASIM CROSSING/NATIONAL HIGHWAY	7	HABIB INTERSECTION / TEXTILE AVENUE SITE
8	TOWNSHIP CROSSING/NATIONAL HIGHWAY	8	MODEL COLONY GRAVEYARD / JINNAH AVENUE
9	HABIB INTERSECTION / TEXTILE AVENUE SITE	9	MANZIL PETROL PUMP CROSSING / NATIONAL HIGHWAY
10	MODEL COLONY GRAVEYARD / JINNAH AVENUE	10	M.A.JINNAH ROAD / I.I.CHUNDRIGAR ROAD (TOWER)
11	MANZIL PETROL PUMP CROSSING / NATIONAL HIGHWAY	11	GULZAR-E-HIJRI CHOWK / PS SOHRAB GOTH
		12	JAHANGIR ROAD / CLAYTON ROAD / M.A.JINNAH ROAD (GRUMANDIR)
		13	SAHBA AKHTAR ROAD / SHAHRAH-E- AL QUDS (MOUCHI MOUR)
		14	ABUL ASAR HAFEEZ JALANDHARI ROAD / KAMRAN CHOWRANGI GULISTAN-E-JAUHAR
		15	ABUL ASAR HAFEEZ JALANDHARI ROAD / MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR
		16	MAI KOLACHI ROAD / NLC CUT
		17	NASIR JUMP KORANGI 12000 ROAD
		18	KORANGI NO-4 KORANGI 12000 ROAD

107

Handing/Taking Over certificates of New Traffic Signals at Karachi

111

TRAFFIC ENGINEERING BUREAU
KARACHI DEVELOPMENT AUTHORITY

8th Floor, Civic Centre, Gulshan-e-Iqbal, Karachi
Ph: 021-99230655 Fax: 99231304

NO.EE/TC&O/TEB/KDA/2020/ 46/2043

Dated: 24-10-2020

The Executive Engineer,
Sindh Mass Transit Authority,
Government of Sindh

SUBJECT: HANDING OVER OF THE INSTALLATION / UP-GRADATION WORK OF TRAFFIC SIGNALS IN KARACHI DURING CURRENT FINANCIAL YEAR 2020-21 UNDER ADP SCHEME NO. 1902

With reference to your letter No.SMTA/INFRA/SIG/2020/2013 dated. 06-10-2020 the undersigned is directed to informed that The Senior Director TEB and The Chief Engineer (Dev),KDA are pleased to grant approval for taking over the seven (07 NOS) Traffic Signals mentioned in your above referred letter. Therefore from dated 13-10-2020 the Traffic Signal Unit TEB, take over the said Traffic Signals for further maintenance.

Executive Engineer (T/S), TC&O
Traffic Engineering Bureau
Karachi Development
Authority

2043
23/10/2020

Copy to:
1. The Managing Director, SMTA.
2. The Chief Engineer (Dev), KDA.
3. The Senior Director, TEB, KDA.
4. The Director Infrastructure / Project, SMTA.

112

No. SMTA/INFRA/SIG/2020/2013
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 06-10, 2020

To,

The Senior Director,
(Traffic Engineering Bureau),
KDA, Karachi

SUBJECT: HANDING OVER OF THE INSTALLATION/UP-GRADATION WORK OF TRAFFIC SIGNALS IN KARACHI DURING CURRENT FINANCIAL YEAR 2020-21 UNDER ADP SCHEME NO. 1902

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority [SMTA] has undertaken the Installation and Up-gradation traffic signals work in Karachi including other districts in Sindh under ADP Scheme No.1902 to solve traffic regulatory issues including traffic congestion.

2. In this regard M/s Silicon Communication Security JV Ghause Builders (Selected through Competitive Bidding Process) has completed the Installation of New Traffic Signals and up-gradation of existing traffic signals at Karachi on as per given specifications. Following intersection/signals were installed by SMTA are being handed over to the Senior Director, (Traffic Engineering Bureau), KDA, Karachi.

Inventory of the traffic signals systems attached as **Annexure-"A"**.

Sr. No.	07 number of Traffic Signals at following locations at Karachi by Sindh Mass Transit Authority, Government of Sindh.
1.	Jahangir Road / Clayton Road / M.A. Jinnah Road (Gurumandir) A & B
2.	Sahba Akhtar Road / Shahrah-E-Al Quds (Mouchi Mour)
3.	Model Colony Graveyard / Jinnah Avenue
4.	Tipu Sultan Intersection / Shaheed-E-Millat Road (under fly over)
5.	Shahrah-E-Jahangir / Azizabad Road (comprehensive school F.B. Area)
6.	Shah Jahan / Gulbrg Intersection F.B Area
7.	Shah Rah- Jahanir /Tahir villay Intersection F.B Area

3. Please Conform taking over traffic Signals of the above mention location for the purpose of record no liability is pending with SMTA on the same

EXECUTIVE ENGINEER,
SINDH MASS TRANSIT AUTHORITY,
GOVERNMENT OF SINDH

Copy to:

1. Managing Director, SMTA.
2. The Director Infrastructure / Project, SMTA.
3. Project Director, EDHI Line, GoS.
4. PS to Minister Transport & Mass Transit Department, GoS.
5. PS to Chairman P&D GoS.
6. PS to Secretary Transport & Mass Transit Department, GoS.
7. Master File.

DATED. 05-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	SHAH JAHAN AVENUE /GULBERG INTERSECTION F.B.AREA

DETAIL OF EQUIPMENT

CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	02 NOS
STANDARD POLE (ISSUE BY TEB STORE)	11 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	16 NOS
1-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	04 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

DATED: 06-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	SHAHRAH-E-JAHANGIR / AZIZABAD ROAD (COMPREHENSIVE SCHOOL F.B.AREA)

DETAIL OF EQUIPMENT

CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	02 NOS
STANDARD POLE (ISSUE BY TEB STORE)	11 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	16 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

Installed Date: 04-06-2019

DATED: 05-16-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	MODEL COLONY GRAVEYARD / JINNAH AVENUE

DETAIL OF EQUIPMENT

CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	03 NOS
STANDARD POLE (ISSUE BY TEB STORE)	10 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	03 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	11 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	10 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

Installed Date.04-06-2018

116

DATED: 06-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	TIPU SULTAN INTERSECTION / SHAHEED-E-MILLAT ROAD (UNDER FLY OVER)

DETAIL OF EQUIPMENT

Equipment	Qty
CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	04 NOS
STANDARD POLE (ISSUE BY TEB STORE)	08 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	04 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department.
Government of Sindh

Installed Date: 04-06-2019

DATED: 06-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	JAHANGIR ROAD / CLAYTON ROAD / M.A.JINNAH ROAD (GRUMANDIR) A & B

DETAIL OF EQUIPMENT

Item	Quantity
CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	02 NOS
MAST ARM POLE (ISSUE BY TEB STORE)	06 NOS
STANDARD POLE (ISSUE BY TEB STORE)	11 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	06 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	20 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	16 NOS
DUAL COLOUR COUNT DOWN TIMER	07 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

Installed Date: 04-06-2019

DATED. 05-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	SHAH RAH-E-JAHANGIR /TAHIR VILLA INTERSECTION F.B.AREA

DETAIL OF EQUIPMENT

Item	Quantity
CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	02 NOS
STANDARD POLE (ISSUE BY TEB STORE)	11 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	16 NOS
1-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	04 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

SINDH MASS TRANSIT AUTHORITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

Installed Date.04-06-2019

DATED: 06-10-20

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	SAHBA AKHTAR ROAD / SHAHRAH-E- AL QUDS (MOUCHI MOUR)

DETAIL OF EQUIPMENT

CONTROLLER T-400 16 PHASE (ISSUE BY TEB STORE)	01 NO
MAST ARM POLE (ISSUE BY TEB STORE)	02 NOS
STANDARD POLE (ISSUE BY TEB STORE)	11 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED BALL)	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	12 NOS
2-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	16 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS

SILICON COMMUNICATION & SECURITY

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department
Government of Sindh

SINDH MASS TRANSIT AUTHORITY

Installed Date: 04-06-2019

119/A

NEW SIGNALS COST ESTIMATES IN KARACHI, SUKKUR & LARKANA

REVISE COST ESTIMATES FOR NEW TRAFFIC SIGNALS

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	7	200000	NOS	1400000
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	19	8000	NOS	152000
3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		45000	NOS	
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	7	55000	NOS	385000
5	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		29000	NOS	
6	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.		17000	NOS	
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	151	1150	NOS	173650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	62	9000	NOS	558000
9	PROVIDING & FIXING OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	8	16000	NOS	128000

REVISE COST ESTIMATES FOR NEW TRAFFIC SIGNALS

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
10	PROVIDING & FIXING CANTILEVER POLE ASSEMBLY WITH ALL NECESSARY FIYYING,POLE CAP ETC,COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING	5	45000	NOS	225000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	14895	650	METER	9681750
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 1) CIRCUIT BREAKER SINGLE PHASE. 3) INDICATION LAMP.	26	9650	NOS	250900
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	18	30000	NOS	540000
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	938	747	METER	700686
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	170	7400	NOS	1258000
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	67	15000	NOS	1005000

REVISE COST ESTIMATES FOR NEW TRAFFIC SIGNALS

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	2906	3450	METER	10025700
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	149	8600	NOS	1281400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	2960.272	550	METER	1628149.6
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	106	35000	NOS	3710000
21	LANE DEVICE AND MODEM		50000	NOS	
22	NET DEVICE WITH 12 MONTHS MONTHLY RENT		50000	NOS	
23	FISH EYE CAMERA		120000	NOS	
24	RG 45 CABLE FOR CAMERA		115	METER	
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	258	54000	NOS	13932000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	180	36000	NOS	6480000

REVISE COST ESTIMATES FOR NEW TRAFFIC SIGNALS

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	60	18000	NOS	1080000
E-4	PROVIDING & FIXING OF UPS 1000 WATTS SIGN WAVES		52000	NOS	
E-5	PROVIDING & FIXING OF DRY BATTERY 100 AMP MAINTENANCE FREE		26000	NOS	
E-6	PROVIDING & FIXING OF DISPLAY SIGN BOARD 4 FEET BY 2 FEET		100000	NOS	
E-7	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	5	22000	NOS	110000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	77	65000	NOS	5005000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	24000	NOS	264000
E-10	PROVIDING & FIXING SOLLAR PANNEL 150 WATT POLYCRSTELLINE		20000	NOS	
E-11	PROVIDING & FIXING INVERTER 1 KW		40720	NOS	
E-12	PROVIDING & FIXING DRY BATTERY 12V DC 175AMP		40000	NOS	
E-13	PROVIDING & FIXING TRAFFIC POLICE KIOSK (KANOPI) IN FIBER MADE 5 FEET ROUND AND HEIGHT AS PER SITE REQUIREMENT		65000	NOS	
E-14	PROVIDING & FIXING OF GUIDE SIGNS/INFORMATIVE SIGN ALUMINUM PLATE AND REFLECTIVE PAPER DIAMOND GRADE		4500 P/SFT	P/SFT	
E-15	COMPONENTS OF SOLLAR PANNEL AC, DC,BOXES DB BOX,SCREW,NUT BOLTS ECT.		55000	NOS	
	TOTAL				**59974235.6**

Total Cost Karachi Sukkur & Larkana.

ESTIMATE PORT QASIM CROSSING NATIONAL HIGHWAY

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	8	EACH	1150	9200
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	900	R.M	650	585000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE PORT QASIM CROSSING NATIONAL HIGHWAY

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	80	R.M	747	59760
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	8	EACH	7400	59200
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	150	R.M	3450	517500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	10	EACH	8600	86000
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	70	R.M	550	38500

ESTIMATE PORT QASIM CROSSING NATIONAL HIGHWAY

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	54000	864000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	36000	0
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9 8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**2834810**

ESTIMATE TOWN SHIP CROSSING NATIONAL HIGHWAY

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	3	EACH	9000	27000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	750	R.M	650	487500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE TOWN SHIP CROSSING NATIONAL HIGHWAY

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	60	R.M	747	44820
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	EACH	15000	45000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	120	R.M	3450	414000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	80	R.M	550	44000

ESTIMATE TOWN SHIP CROSSING NATIONAL HIGHWAY

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	3	EACH	35000	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	6	EACH	36000	216000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	EACH	18000	54000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	EACH	65000	195000
	TOTAL				**2430870**

ESTIMATE GULBERG CHOWRANGI F.B.AREA

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	55000	110000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	EACH	1150	12650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	9000	18000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	680	R.M	650	442000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650

ESTIMATE GULBERG CHOWRANGI F.B.AREA

13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	49	R.M	747	36603
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11	EACH	7400	81400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	2	EACH	15000	30000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	134	R.M	3450	462300

ESTIMATE GULBERG CHOWRANGI F.B.AREA

18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	9	EACH	8600	77400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30	R.M	550	16500
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	65000	0
	TOTAL				**2770503**

ESTIMATE TAHIR VILLA CHOWRANGI F.B.AREA

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	55000	110000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	EACH	1150	12650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	9000	18000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	700	R.M	650	455000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650

ESTIMATE TAHIR VILLA CHOWRANGI F.B.AREA

13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	45	R.M	747	33615
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11	EACH	7400	81400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	2	EACH	15000	30000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	122	R.M	3450	420900

ESTIMATE TAHIR VILLA CHOWRANGI F.B.AREA

18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	9	EACH	8600	77400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30	R.M	550	16500
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	65000	0
	TOTAL				**2739115**

ESTIMATE COMPRENENSIVE SCHOOL F.B.AREA

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	EACH	1150	12650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	9000	18000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	720	R.M	650	468000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE COMPRENENSIVE SCHOOL F.B.AREA

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	49	R.M	747	36603
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11	EACH	7400	81400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	2	EACH	15000	30000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	280	R.M	3450	966000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	12	EACH	8600	103200
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	20	R.M	550	11000

ESTIMATE COMPRENENSIVE SCHOOL F.B.AREA

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	65000	130000
	TOTAL				**3340503**

ESTIMATE TIPU SULTAN / SHAHEED-E-MILLAT

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	8	EACH	1150	9200
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	735	R.M	650	477750
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE TIPU SULTAN / SHAHEED-E-MILLAT

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	37	R.M	747	27639
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	8	EACH	7400	59200
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	100	R.M	3450	345000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	60	R.M	550	33000

ESTIMATE TIPU SULTAN / SHAHEED-E-MILLAT

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	14	EACH	54000	756000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	36000	432000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**2807039**

ESTIMATE HABIB CHOWRANGI SITE

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	10	EACH	1150	11500
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	780	R.M	650	507000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE HABIB CHOWRANGI SITE

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	80	R.M	747	59760
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	10	EACH	7400	74000
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	150	R.M	3450	517500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	60	R.M	550	33000

ESTIMATE HABIB CHOWRANGI SITE

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**3111210**

ESTIMATE MODEL COLONY

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	EACH	55000	165000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	10	EACH	1150	11500
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	3	EACH	9000	27000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	650	R.M	650	422500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650

ESTIMATE MODEL COLONY

13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	30	R.M	747	22410
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	10	EACH	7400	74000
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	EACH	15000	45000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	80	R.M	3450	276000

ESTIMATE MODEL COLONY

18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	180	R.M	550	99000
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	3	EACH	35000	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	11	EACH	54000	594000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	EACH	36000	360000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	18000	0
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	65000	0
	TOTAL				**2300660**

ESTIMATE MANZIL PUMP NATIONAL HIGHWAY

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	7	EACH	1150	8050
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	700	R.M	650	455000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE MANZIL PUMP NATIONAL HIGHWAY

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	50	R.M	747	37350
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	7	EACH	7400	51800
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	130	R.M	3450	448500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	70	R.M	550	38500

ESTIMATE MANZIL PUMP NATIONAL HIGHWAY

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	6	EACH	36000	216000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**2587650**

ESTIMATE TOWER M.A.JINNAH ROAD

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	3	EACH	9000	27000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	650	R.M	650	422500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE TOWER M.A.JINNAH ROAD

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	40	R.M	747	29880
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	EACH	15000	45000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	100	R.M	3450	345000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	40	R.M	550	22000

ESTIMATE TOWER M.A.JINNAH ROAD

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	EACH	54000	540000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	6	EACH	36000	216000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	18000	36000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	EACH	65000	195000
	TOTAL				**2168930**

ESTIMATE GULZAR-E-HIJRI

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	9	EACH	1150	10350
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	730	R.M	650	474500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE GULZAR-E-HIJRI

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	70	R.M	747	52290
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	9	EACH	7400	66600
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	140	R.M	3450	483000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	40	R.M	550	22000

ESTIMATE GULZAR-E-HIJRI

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**3017190**

ESTIMATE GRUMANDIR M.A.JINNAH ROAD

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	2	EACH	8000	16000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	EACH	1150	12650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	9000	54000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	1280	R.M	650	832000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	2	EACH	9650	19300
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE GRUMANDIR M.A.JINNAH ROAD

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	60	R.M	747	44820
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11	EACH	7400	81400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	6	EACH	15000	90000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	300	R.M	3450	1035000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	130	R.M	550	71500
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	7	EACH	35000	245000

ESTIMATE GRUMANDIR M.A.JINNAH ROAD

E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	21	EACH	54000	1134000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	36000	0
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	EACH	18000	18000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	6	EACH	65000	390000
	TOTAL				**4142470**

ESTIMATE MOCHI MOUR GULSHAN-E-IQBAL

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11	EACH	1150	12650
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	EACH	9000	18000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	745	R.M	650	484250
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE MOCHI MOUR GULSHAN-E-IQBAL

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	20	R.M	747	14940
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11	EACH	7400	81400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	2	EACH	15000	30000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	110	R.M	3450	379500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	5	EACH	8600	43000
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	R.M	550	27500

ESTIMATE MOCHI MOUR GULSHAN-E-IQBAL

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	EACH	65000	130000
	TOTAL				**2704890**

ESTIMATE KAMRAN CHOWRANGI GULISTAN-E-JAUHAR

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	7	EACH	1150	8050
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	750	R.M	650	487500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE KAMRAN CHOWRANGI GULISTAN-E-JAUHAR

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	35	R.M	747	26145
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	7	EACH	7400	51800
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	135	R.M	3450	465750
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	100	R.M	550	55000

ESTIMATE KAMRAN CHOWRANGI GULISTAN-E-JAUHAR

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	15	EACH	54000	810000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**3164695**

ESTIMATE MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR

ESTIMATE MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR					
S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	7	EACH	1150	8050
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	730	R.M	650	474500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	40	R.M	747	29880
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	7	EACH	7400	51800
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	140	R.M	3450	483000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	100	R.M	550	55000

ESTIMATE MUNAWAR CHOWRANGI GULISTAN-E-JAUHAR

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	15	EACH	54000	810000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	16	EACH	36000	576000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**3172680**

ESTIMATE U.S.CONULATE OF KARACHI ON MAIKOLACHI ROAD

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	3	EACH	9000	27000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	700	R.M	650	455000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE U.S.CONULATE OF KARACHI ON MAIKOLACHI ROAD

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	40	R.M	747	29880
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	EACH	15000	45000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	150	R.M	3450	517500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	7	EACH	8600	60200

ESTIMATE U.S.CONULATE OF KARACHI ON MAIKOLACHI ROAD

19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	R.M	550	27500
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	6	EACH	35000	210000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH	13	EACH	54000	702000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	36000	432000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	EACH	65000	195000
	TOTAL				**2800030**

ESTIMATE NASIR JUMP KORANGI 1200 ROAD

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	800	R.M	650	520000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE NASIR JUMP KORANGI 1200 ROAD

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	30	R.M	747	22410
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	160	R.M	3450	552000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	6	EACH	8600	51600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	40	R.M	550	22000

ESTIMATE NASIR JUMP KORANGI 1200 ROAD

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	36000	0
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**2482960**

ESTIMATE KORANGI NO-4, KORANGI 1200 ROAD

S.NO	ITEM	QUANTITY	UNIT	RATE	AMOUNT
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM.	1	EACH	8000	8000
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	EACH	1150	6900
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	EACH	9000	36000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	750	R.M	650	487500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	EACH	9650	9650
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS.	1	EACH	30000	30000

ESTIMATE KORANGI NO-4, KORANGI 1200 ROAD

14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	40	R.M	747	29880
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	EACH	7400	44400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	4	EACH	15000	60000
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	130	R.M	3450	448500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	8	EACH	8600	68800
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	R.M	550	27500

ESTIMATE KORANGI NO-4, KORANGI 1200 ROAD

20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	4	EACH	35000	140000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	12	EACH	54000	648000
E-2	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.		EACH	36000	0
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	18000	72000
E-9	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED .MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	EACH	65000	260000
	TOTAL				**2377130**

177/A

NEW SIGNALS
CIVIL WORKS
COST ESTIMATES
IN
KARACHI

CIVIL WORK ESTIMATE FOR PORT QASIM CROSSING					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	1200	22.23	**26,676.00**
2	P/F **PRECAST KERB**	Rft	600	297.01	**178,206.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1500	1200.2	**18,003.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
6	Preparing **sub grade**	SFt	500	5.2628	**2,631.40**
7	P/L **sub base** Etc	CFt	2500	33.4171	**83,542.75**
8	P/L **Aggregate base course** Etc	CFt	2500	55.4224	**138,556.00**
9	**Painting** with enamel paint of approved quality	SFt	1500	21.1641	**31,746.15**
10	P/I **Pavement marking 2mm Thick**	SFt	2000	117	**234,000.00**
11	Supplying and fixing of **reflectorize road** studs	Each	1000	596.23	**596,230.00**
12	Providing and spraying **Prime Coat**	Sft	5000	14.29	**71,450.00**
13	Applying **TACK Coat**	Sft	5000	9.54	**47,700.00**
14	**2" (5O mm) Thick Asphalt**	Sft	5000	82.747	**413,735.00**
			TOTAL AMOUNT		**1,939,021.80**

CIVIL WORK ESTIMATE FOR TOWNSHIP CROSSING					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	3000	22.23	**66,690.00**
2	P/F **PRECAST KERB**	Rft	800	297.01	**237,608.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	2665	199.77	**532,387.05**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	3000	1200.2	**36,006.00**
5	Dismantling of cement concrete road	CFt	750	33.275	**24,956.25**
6	Preparing **sub grade**	SFt	500	5.2628	**2,631.40**
7	P/L **sub base** Etc	CFt	2500	33.4171	**83,542.75**
8	P/L **Aggregate base course** Etc	CFt	4000	55.4224	**221,689.60**
9	**Painting** with enamel paint of approved quality	SFt	2200	21.1641	**46,561.02**
10	P/I **Pavement marking 2mm Thick**	SFt	2000	117	**234,000.00**
11	Supplying and fixing of **reflectorize road** studs	Each	1000	596.23	**596,230.00**
12	Providing and spraying **Prime Coat**	Sft	5000	14.29	**71,450.00**
13	Applying **TACK Coat**	Sft	5000	9.54	**47,700.00**
14	**2" (5O mm) Thick Asphalt**	Sft	5000	82.747	**413,735.00**
			TOTAL AMOUNT		**2,615,187.07**

GULBERG CHORANGI

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	2450.285	22.23	**54,469.84**
2	P/F **PRECAST KERB**	Rft	817.43	297.01	**242,784.88**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft		199.77	-
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	4900.57	1200.2	**58,816.64**
5	Stone Soling	CFT	75	42	**3,150.00**
6	PCC 1:3:6	CFT	769	125.95	**96,855.55**
7	RCC 1:1.5:3	CFT	625	349	**218,125.00**
8	Steel Reinfrorcement	Cwt	73.8243	5001.7	**369,247.00**
9	Dismantling of cement concrete road	CFt	2450.286	33.275	**81,533.27**
10	Preparing **sub grade**	SFt	531.143	5.2628	**2,795.30**
11	P/L **sub base** Etc	CFt	531.143	33.4171	**17,749.26**
12	P/L **Aggregate base course** Etc	CFt	531.143	55.4224	**29,437.22**
13	Excavation in slushy, daldaly and disposal	CFT	750	13.55	**10,162.50**
14	**Painting** with enamel paint of approved quality	SFt	1751.143	21.1641	**37,061.37**
15	P/I **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft	26731.37	14.29	**381,991.23**
18	Applying **TACK Coat**	Sft	26731.37	9.54	**255,017.23**
19	**2" (5O mm) Thick Asphalt**	Sft	26731.37	82.747	**2,211,940.37**
				TOTAL AMOUNT	**4,071,136.654**

180

181

TAHIR VILLA

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	8959.14	22.23	**199,161.75**
2	P/F **PRECAST KERB**	Rft	1437	297.01	**426,803.37**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft		199.77	-
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	21784.36	1200.2	**261,455.89**
5	Stone Soling	CFT	360	42	**15,120.00**
6	PCC 1:3:6	CFT	1831	125.95	**230,614.45**
7	RCC 1:1.5:3	CFT	1560	349	**544,440.00**
8	Steel Reinfrorcement	Cwt	158.0936	5001.7	**790,736.76**
9	Dismantling of cement concrete road	CFt	12825.214	33.275	**426,759.00**
10	Preparing **sub grade**	SFt	2828.571	5.2628	**14,886.20**
11	P/L **sub base** Etc	CFt	2828.571	33.4171	**94,522.64**
12	P/L **Aggregate base course** Etc	CFt	2828.571	55.4224	**156,766.19**
13	Excavation in slushy, daldaly and disposal	CFT	1500	13.55	**20,325.00**
14	**Painting** with enamel paint of approved quality	SFt	2155.5	21.1641	**45,619.22**
15	P/l **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft	33810.21	14.29	**483,147.90**
18	Applying **TACK Coat**	Sft	33810.21	9.54	**322,549.40**
19	**2" (5O mm) Thick Asphalt**	Sft	33810.21	82.747	**2,797,693.45**
				TOTAL AMOUNT	**6,830,601.215**

181

182

COMPREHENSIVE SCHOOL CHORANGI

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	5657.143	22.23	**125,758.29**
2	P/F **PRECAST KERB**	Rft	388.665	297.01	**115,437.39**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft		199.77	-
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	14142.857	1200.2	**169,742.57**
5	Stone Soling	CFT	630	42	**26,460.00**
6	PCC 1:3:6	CFT	315	125.95	**39,674.25**
7	RCC 1:1.5:3	CFT	2990	349	**1,043,510.00**
8	Steel Reinfrorcement	Cwt	267.4223	5001.7	**1,337,566.12**
9	Dismantling of cement concrete road	CFt	8485.714	33.275	**282,362.13**
10	Preparing **sub grade**	SFt	2828.571	5.2628	**14,886.20**
11	P/L **sub base** Etc	CFt	2828.571	33.4171	**94,522.64**
12	P/L **Aggregate base course** Etc	CFt	2828.571	55.4224	**156,766.19**
13	Excavation in slushy, daldaly and disposal	CFT	900	13.55	**12,195.00**
14	**Painting** with enamel paint of approved quality	SFt	582.712	21.1641	**12,332.58**
15	P/I **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft	28965.123	14.29	**413,911.61**
18	Applying **TACK Coat**	Sft	28965.123	9.54	**276,327.27**
19	**2" (50 mm) Thick Asphalt**	Sft	28965.123	82.747	**2,396,777.03**
				TOTAL AMOUNT	**6,518,229.277**

182

HYABIB BANK CHORANGI SITE AREA

S. No	ITEM	Unit	QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	3500	22.23	**77,805.00**
2	P/F **PRECAST KERB**	Rft	1350	297.01	**400,963.50**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	1000	199.77	**199,770.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	7500	1200.2	**90,015.00**
5	Dismantling of cement concrete road	CFt	2000	33.275	**66,550.00**
6	Preparing **sub grade**	SFt	3000	5.2628	**15,788.40**
7	P/L **sub base** Etc	CFt	2000	33.4171	**66,834.20**
8	P/L **Aggregate base course** Etc	CFt	4500	55.4224	**249,400.80**
9	**Painting** with enamel paint of approved quality	SFt	3000	21.1641	**63,492.30**
10	P/I **Pavement marking 2mm Thick**	SFt	2000	117	**234,000.00**
11	Supplying and fixing of **reflectorize road** studs	Each	1000	596.23	**596,230.00**
12	Providing and spraying **Prime Coat**	Sft	15000	14.29	**214,350.00**
13	Applying **TACK Coat**	Sft	15000	9.54	**143,100.00**
14	**2" (5O mm) Thick Asphalt**	Sft	15000	82.747	**1,241,205.00**
			TOTAL AMOUNT		**3,659,504.20**

MODEL COLONY

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	8439.5	22.23	**187,610.09**
2	P/F **PRECAST KERB**	Rft	325	297.01	**96,528.25**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	4539.632	199.77	**906,882.28**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	8439.5	1200.2	**101,290.88**
5	Stone Soling	CFT		42	-
6	PCC 1:3:6	CFT	271.75	125.95	**34,226.91**
7	RCC 1:1.5:3	CFT	410.5	349	**143,264.50**
8	Steel Reinfrorcement	KG		100	-
9	Dismantling of cement concrete road	CFt	4219.75	33.275	**140,412.18**
10	Preparing **sub grade**	SFt		5.2628	-
11	P/L **sub base** Etc	CFt		33.4171	-
12	P/L **Aggregate base course** Etc	CFt	7990.5	55.4224	**442,852.69**
13	Excavation in slushy, daldaly and disposal	CFT		13.55	-
14	**Painting** with enamel paint of approved quality	SFt	4761.41	21.1641	**100,770.96**
15	P/l **Pavement marking 2mm Thick**	SFt	5316.056	117	**621,978.55**
16	Supplying and fixing of **reflectorize road** studs	Each	2300	596.23	**1,371,329.00**
17	Providing and spraying **Prime Coat**	Sft		14.29	-
18	Applying **TACK Coat**	Sft		9.54	-
19	**2" (5O mm) Thick Asphalt**	Sft		82.747	-
				TOTAL AMOUNT	**4,147,146.289**

CIVIL WORK ESTIMATE FOR MANZIL PUMP

S. No	ITEM	Unit	QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	1500	22.23	33,345.00
2	P/F **PRECAST KERB**	Rft	856	297.01	254,240.56
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	665	199.77	132,847.05
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	2000	1200.2	24,004.00
5	Dismantling of cement concrete road	CFt	1500	33.275	49,912.50
6	Preparing **sub grade**	SFt	2500	5.2628	13,157.00
7	P/L **sub base** Etc	CFt	2500	33.4171	83,542.75
8	P/L **Aggregate base course** Etc	CFt	1500	55.4224	83,133.60
9	**Painting** with enamel paint of approved quality	SFt	3000	21.1641	63,492.30
10	P/I **Pavement marking 2mm Thick**	SFt	2000	117	234,000.00
11	Supplying and fixing of **reflectorize road** studs	Each	1000	596.23	596,230.00
12	Providing and spraying **Prime Coat**	Sft	5000	14.29	71,450.00
13	Applying **TACK Coat**	Sft	5000	9.54	47,700.00
14	**2" (5O mm) Thick Asphalt**	Sft	5000	82.747	413,735.00
				TOTAL AMOUNT	**2,100,789.76**

CIVIL WORK ESTIMATE FOR TOWER					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	3000	22.23	**66,690.00**
2	P/F **PRECAST KERB**	Rft	500	297.01	**148,505.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	5000	1200.2	**60,010.00**
5	Dismantling of cement concrete road	CFt	1500	33.275	**49,912.50**
6	Preparing **sub grade**	SFt		5.2628	-
7	P/L **sub base** Etc	CFt		33.4171	-
8	P/L **Aggregate base course** Etc	CFt		55.4224	-
9	**Painting** with enamel paint of approved quality	SFt	2000	21.1641	**42,328.20**
10	P/I **Pavement marking 2mm Thick**	SFt		117	-
11	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
12	Providing and spraying **Prime Coat**	Sft	2500	14.29	**35,725.00**
13	Applying **TACK Coat**	Sft	2500	9.54	**23,850.00**
14	**2" (5O mm) Thick Asphalt**	Sft	2500	82.747	**206,867.50**
			TOTAL AMOUNT		713,796.20

CIVIL WORK ESTIMATE FOR GULZAR E HIJRI

S. No	ITEM	Unit	QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	2,487.50	22.23	**55,297.13**
2	P/F **PRECAST KERB**	Rft	350.00	297.01	**103,953.50**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400.00	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	4,000.00	1200.2	**48,008.00**
5	Dismantling of cement concrete road	CFt	1,000.00	33.275	**33,275.00**
6	Preparing **sub grade**	SFt	1,500.00	5.2628	**7,894.20**
7	P/L **sub base** Etc	CFt	2,250.00	33.4171	**75,188.48**
8	P/L **Aggregate base course** Etc	CFt	1,500.00	55.4224	**83,133.60**
9	**Painting** with enamel paint of approved quality	SFt	1,000.00	21.1641	**21,164.10**
12	Providing and spraying **Prime Coat**	Sft	2,500.00	14.29	**35,725.00**
13	Applying **TACK Coat**	Sft	2,500.00	9.54	**23,850.00**
14	**2" (50 mm) Thick Asphalt**	Sft	2,500.00	82.747	**206,867.50**
			TOTAL AMOUNT		774,264.50

MOCHI MOR

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	428.04	22.23	**9,515.33**
2	P/F **PRECAST KERB**	Rft	492.297	297.01	**146,217.13**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	280.25	199.77	**55,985.54**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	873.97	1200.2	**10,489.39**
5	Stone Soling	CFT		42	-
6	PCC 1:3:6	CFT		125.95	-
7	RCC 1:1.5:3	CFT		349	-
8	Steel Reinfrorcement	KG		100	-
9	Dismantling of cement concrete road	CFt	356.01225	33.275	**11,846.31**
10	Preparing **sub grade**	SFt		5.2628	-
11	P/L **sub base** Etc	CFt		33.4171	-
12	P/L **Aggregate base course** Etc	CFt		55.4224	-
13	Excavation in slushy, daldaly and disposal	CFT		13.55	-
14	**Painting** with enamel paint of approved quality	SFt	760.998	21.1641	**16,105.84**
15	P/I **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft		14.29	-
18	Applying **TACK Coat**	Sft		9.54	-
19	**2" (50 mm) Thick Asphalt**	Sft		82.747	-
				TOTAL AMOUNT	**250,159.54**

188

CIVIL WORK ESTIMATE FOR KAMRAN CHORANGI

S. No	ITEM	Unit	TOTAL QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	525	22.23	**11,670.75**
2	P/F **PRECAST KERB**	Rft	350	297.01	**103,953.50**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1000	1200.2	**12,002.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
6	**Painting** with enamel paint of approved quality	SFt	750	21.1641	**15,873.08**
7	Applying **TACK Coat**	Sft	1000	9.54	**9,540.00**
8	**2" (5O mm) Thick Asphalt**	Sft	1000	82.747	**82,747.00**
			TOTAL AMOUNT		332,331.83

CIVIL WORK ESTIMATE FOR MUNAWAR CHORANGI					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	750	22.23	**16,672.50**
2	P/F **PRECAST KERB**	Rft	500	297.01	**148,505.00**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	665	199.77	**132,847.05**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	1500	1200.2	**18,003.00**
5	Dismantling of cement concrete road	CFt	500	33.275	**16,637.50**
7	P/L **sub base** Etc	CFt	800	33.4171	**26,733.68**
8	P/L **Aggregate base course** Etc	CFt	1000	55.4224	**55,422.40**
9	**Painting** with enamel paint of approved quality	SFt	1000	21.1641	**21,164.10**
10	Providing and spraying **Prime Coat**	Sft	1000	14.29	**14,290.00**
11	Applying **TACK Coat**	Sft	1000	9.54	**9,540.00**
12	**2" (5O mm) Thick Asphalt**	Sft	1000	82.747	**82,747.00**
			TOTAL AMOUNT		542,562.23

CIVIL WORK ESTIMATE FOR NASIR JUMP

S. No	ITEM	Unit	QTY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	2487.32	22.23	**55,293.12**
2	P/F **PRECAST KERB**	Rft	350	297.01	**103,953.50**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	4000	1200.2	**48,008.00**
5	Dismantling of cement concrete road	CFt	1000	33.275	**33,275.00**
6	**Painting** with enamel paint of approved quality	SFt	1000	21.1641	**21,164.10**
7	Providing and spraying Prime Coat	Sft	2,500	14.29	**35,725.00**
8	Applying **TACK Coat**	Sft	2,500	9.54	**23,850.00**
9	**2" (5O mm) Thick Asphalt**	Sft	2,500	82.747	**206,867.50**
				TOTAL	**608,044.22**

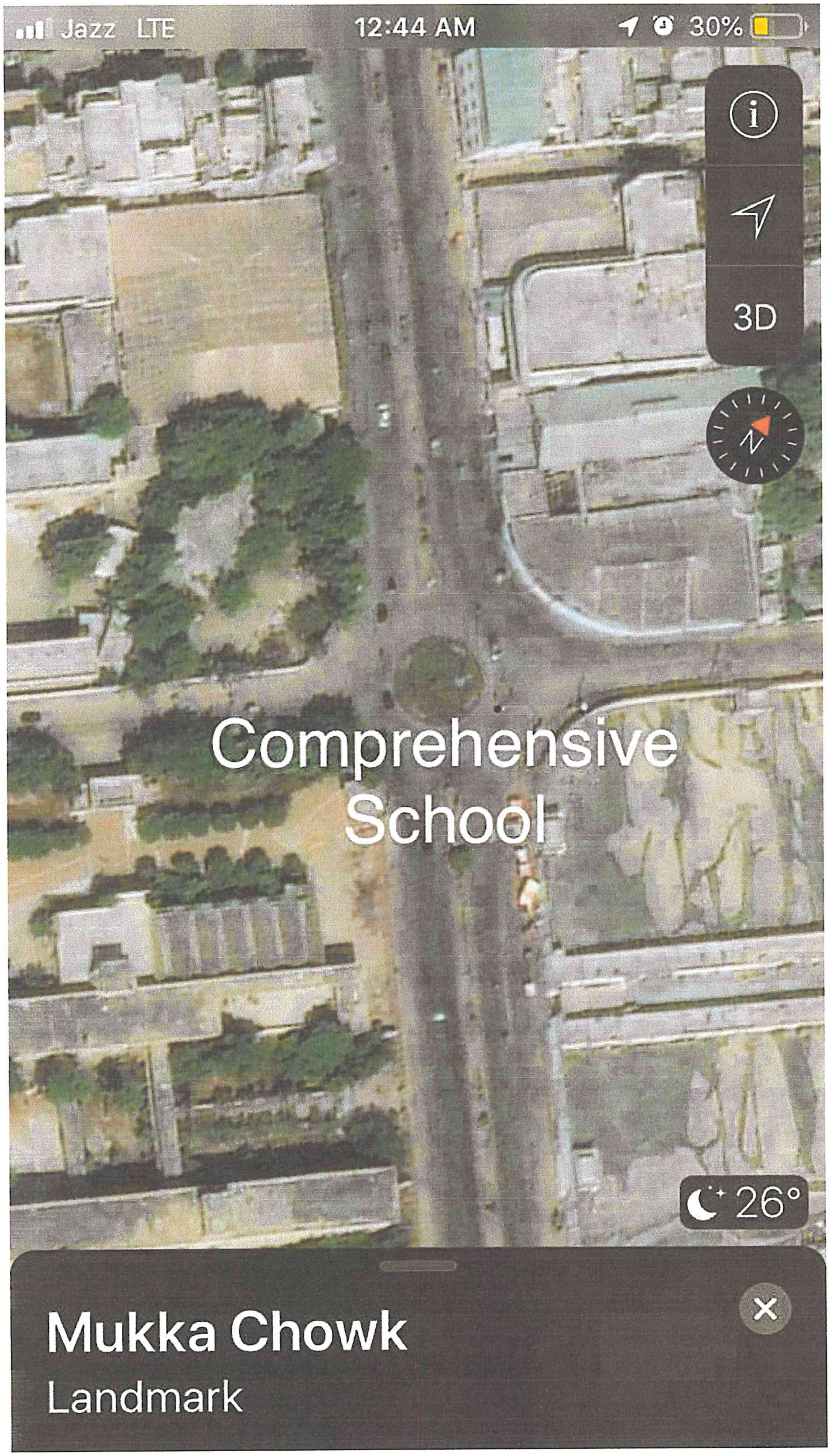
CIVIL WORK ESTIMATE FOR KORANGI # 4					
S. No	**ITEM**	**Unit**	**QTY**	**Rate**	**Amount**
1	**Excavation** for foundation of building, bridges and other structures	CFt	2,487.50	22.23	**55,297.13**
2	P/F **PRECAST KERB**	Rft	350.00	297.01	**103,953.50**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	400.00	199.77	**79,908.00**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	4,000.00	1200.2	**48,008.00**
5	Dismantling of cement concrete road	CFt	1,000.00	33.275	**33,275.00**
6	Preparing **sub grade**	SFt	1,500.00	5.2628	**7,894.20**
7	P/L **sub base** Etc	CFt	2,250.00	33.4171	**75,188.48**
8	P/L **Aggregate base course** Etc	CFt	1,500.00	55.4224	**83,133.60**
9	**Painting** with enamel paint of approved quality	SFt	525.00	21.1641	**11,111.15**
12	Providing and spraying **Prime Coat**	Sft	2,500.00	14.29	**35,725.00**
13	Applying **TACK Coat**	Sft	2,500.00	9.54	**23,850.00**
14	**2" (5O mm) Thick Asphalt**	Sft	2,500.00	82.747	**206,867.50**
			TOTAL AMOUNT		**764,211.55**


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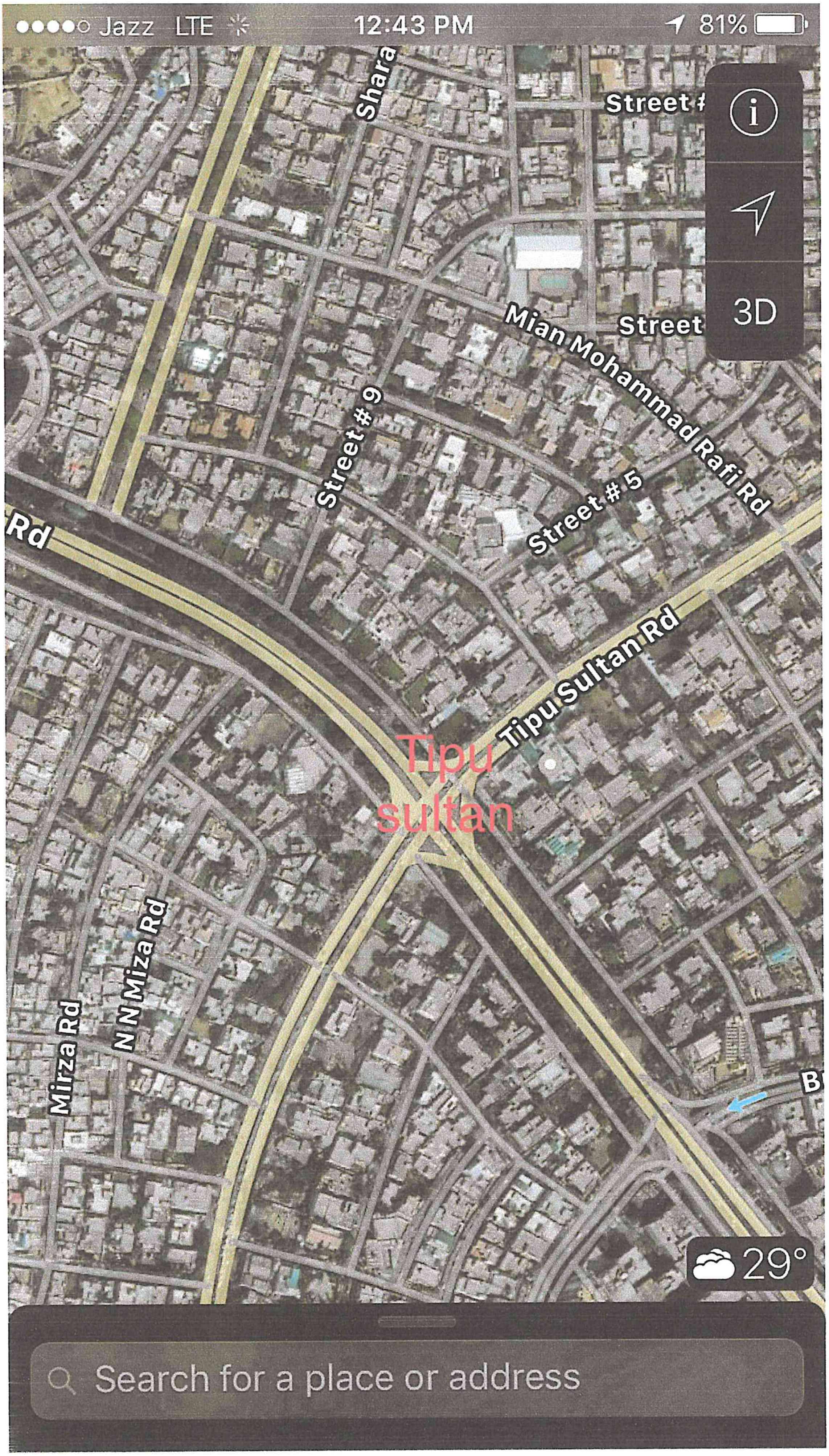
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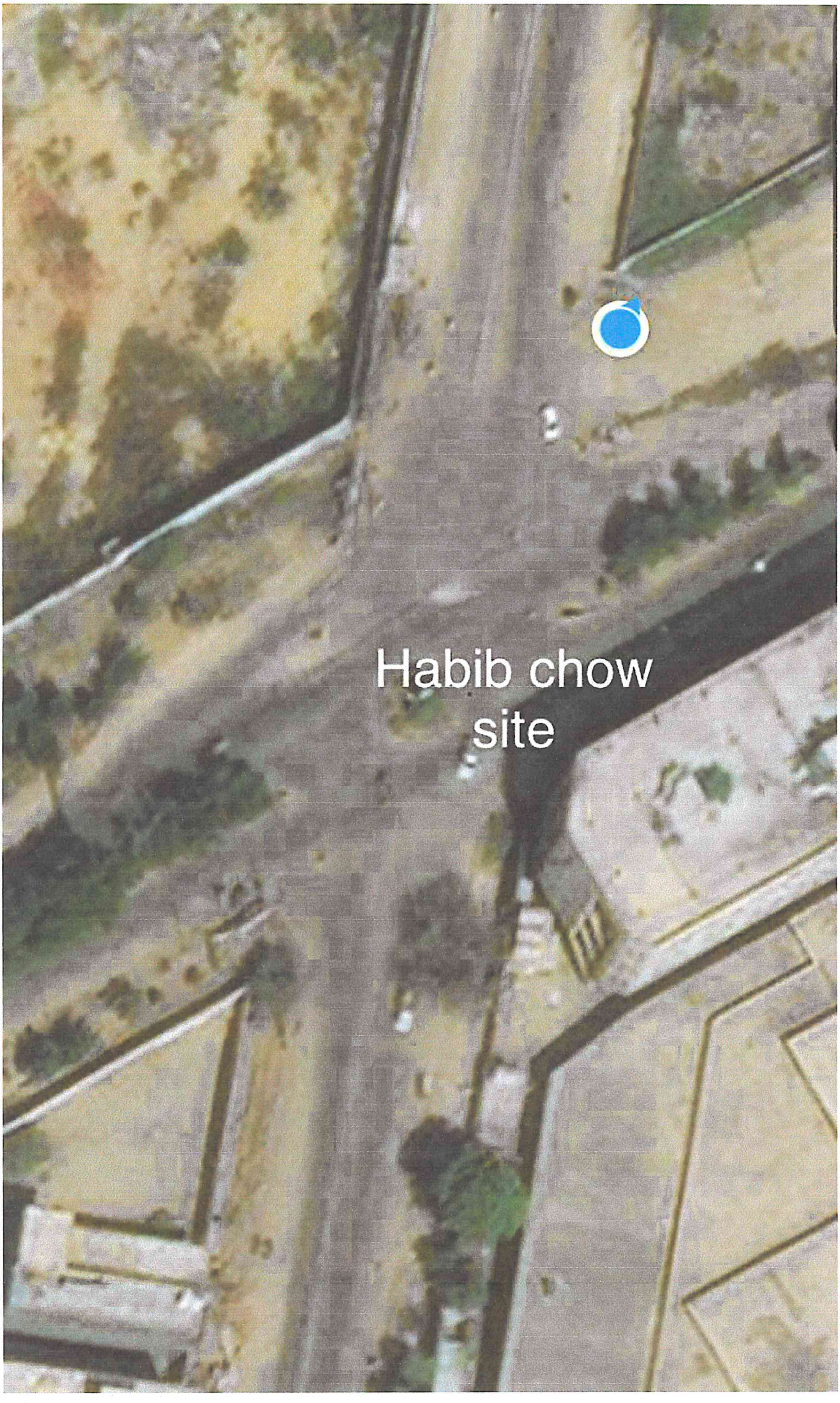
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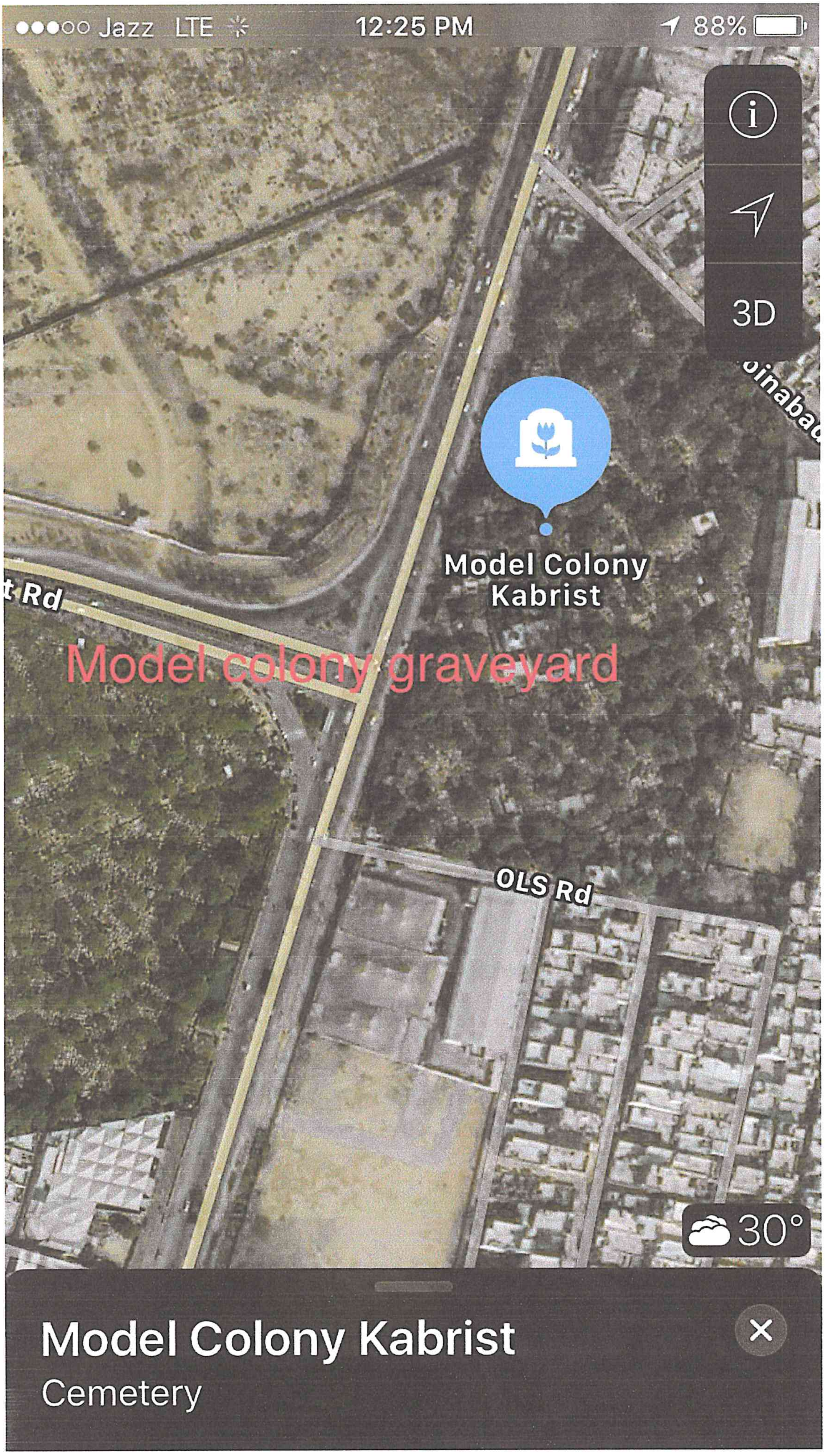


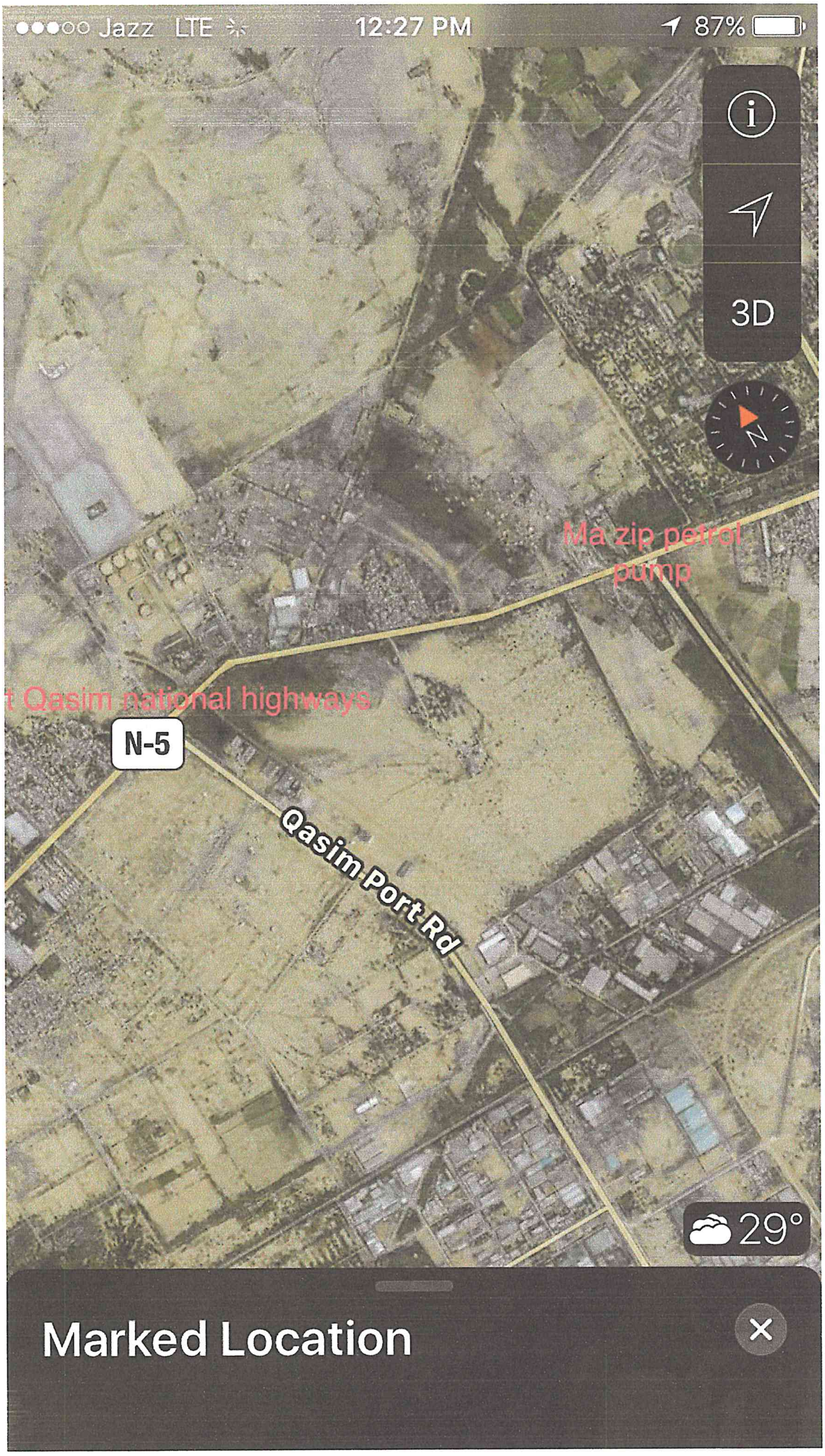
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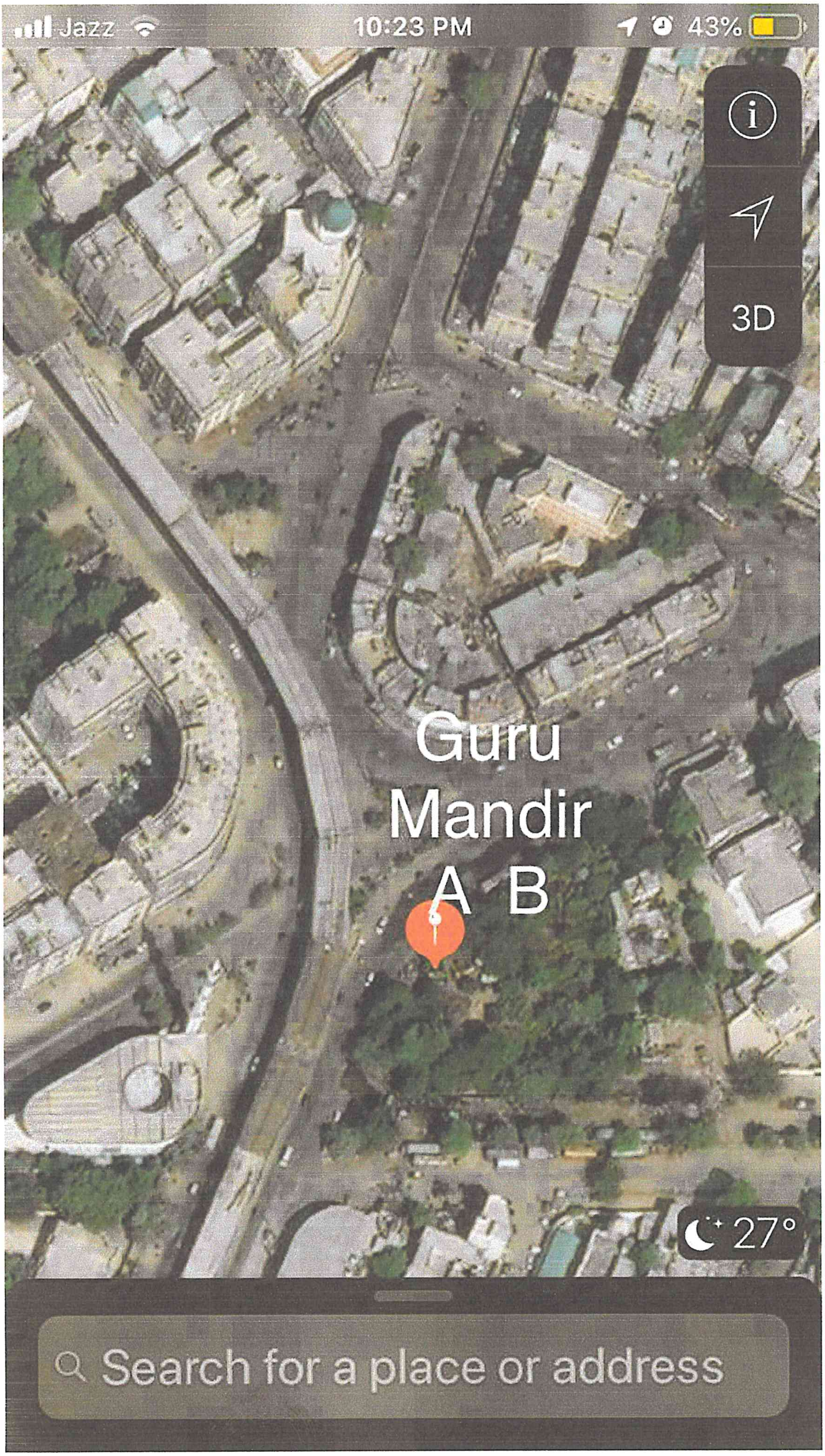



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TOTAL COST ESTIMATES CIVIL WORKS IN KARACHI, LARKANA & SUKKUR

COST ESTIMATES CIVIL WORK

ITEM #	DESRIPTION	UNIT	RATE	QTY	AMOUNT
1	Dismantling of existing asphalt concrete road i/e base, sub base a disposal of dismantled material to designated place	%CFt	773.86		
2	Excavation for foundation of building, bridges and other structures including Rebelling dressing, Refilling Around structure with excavated earth watering and ramming lead upto 5 Ft.	%0 CFt	3176.25		
3	Cement concrete plain i/c placing, compacting, Finishing, and Curing Etc.	%CFt	12595.00		
4	P/F Cement paving block flooring having size of 197*197*60 MM of city/ quddra / cobble shape having strength b/w 5000 psi to 8500 psi i/c filling the joints with hill sand and laying in specified manners/patern and design etc complete Cpt # 8 Item # 71 pg # 49	Rft	199.77	18156.882	3627200.317
5	**kerbstone** providing & fixing Precast Edge Block 3750 PSI Industrial Made Size 6 Inches high includig the cost of cartage, excavation, form work for haunching, 1450 PSI lean concrete, 2250 PSI concrete for haunching, 1:4 cement sand mortor. (shedule of rats Highways work 2012) Miscellaneous Item # 14 pg # 16	Rft	297.01	13712.392	4072717.548
6	Cartage of all Material Lead upto 10 Miles chapter 14 item 7 p.g 80	cft	12.002	105026.117	1260523.456
7	Excavation for foundation i.c. boulders etc complete (NSR)	cft	22.23	62643.971	1392575.475
8	(c)Dismantling of Cement concrete plain 1:2:4 chapter # 2 Item # 19 pg # 10	cft	33.275	55245.836	1838305.193
9	P/L Stone soiling (NSR)	cft	42	4875.585	204774.57
10	Cement concrte plain inculding placing completing ,finishing and curing ,complete (inculding screening and washing at stone agreggate without shutting . Chapter # 4 item # 5 p.g # 16				
	(h) Ratio 1:3:6	cft	125.95	8386.12	1056231.814
11	Reinforced Cement Concrete work including all labour and material except the cost of steel reinforement and its labour for bending and binding which will be paid seprately .This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface (inculding screening and washing of shingle) chapter # 4 item # 6				
	(11) 1:1:1/2:3 (pg No 17)	cft	349	5585.5	1949339.5
12	Fabrication of mild steel re-enforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost binding wire (also includes removal of rust from bars.) chapter 4 item no 8 p.g 17	p.cwt	5001.7	499.34	2497548.878
13	Preparing sub-grade including earth excavation of filling to an average depth of 9" dressing to camber and consolidation with power roller (shedule of rates Highways work 2012) Item # 2 pg # 2	sft	5.2628	20769.065	109303.4353

COST ESTIMATES CIVIL WORK

ITEM #	DESRIPTION	UNIT	RATE	QTY	AMOUNT
14	Preparing sub-base by supplying and spreading well graded pit or bed run gravel having a liquid limit not greater than 25 and plasticity index not greater than 6 in proper camber and grade including watering rolling and compacting in layers, thickness of each compacting layer not exceeding 6" compacted up-to 98-100% density as per modified AASHTO density (rate i/c all cost of material t&p and carriage up to 3 chanins). (s/r) (shedule of rates Highways work 2012) Item # 11 pg 4	cft	33.4171	29464.13	984605.7786
15	P/L aggregate base course in proper grade and camber having cbr 80% as per AASHTO standard speculations i/c spreading and compacting by approved mechanical means (motor grader ,vibratory roller and smooth wheel roller etc) watering to maintain the moisture content the compaction of each layer shall 100% to the max dry density (rate i/c all cost of material t&p and carriage upto 3 chains),(s/r) (shedule of rates Highways work 2012) Item # 13 pg # 5	cft	55.4224	33678.785	1866559.094
16	Excavation in salushy, daldaly and disposal of surplus earth within one chain, lift up to 20ft and lead up to one chain (NSR)	cft	13.55	3150	42682.5
17	Painting 3 coats of approved quality etc complete as required chapter 11 item 5 p.g 69	sft	21.1641	31812.76	673288.4339
18	P/A pavement marking 2mm thick thermoplastic paint with drop in glass beads shall confirm with AASHTO designation m-247 the surface should be clean from dust before applying by using mechanical mean blower i/c all necessary arrangement for diversion of traffic etc. approved by the engineer-in-charge (NSR)	sft	117	13316.056	1557978.552
19	Supplying and fixing of reflectorize road studs double face, flush surface type (shedule of rates Highways work 2012) (Miscellaneous) Item # 11 pg 15	each	596.23	6300	3756249
20	Providing and spraying prime coat with medium curing cut back asphalt of penetration grade 60/70 Prime Coat shall be use at the rate of 7 kg % sft at 70 mixed adequate quantity of kerosine oil,using uniformaly presure spreay distrubuter / boiler with automatic temperature controller prior to be clean by means of approved mechanical sweepers blowers and hard brooms and disposal same withen three miles .after the application traffic shall be kept off from surface till the laying of bitumanous course material and methodology shall fully comply the tests and specification of AASHTO and as directe by the engineer incharge (NSR)	sft	14.29	130506.7	1864940.743

COST ESTIMATES CIVIL WORK

ITEM #	DESRIPTION	UNIT	RATE	QTY	AMOUNT
21	Providing and spraying coat with slow setting emulsified asphalt of penetration grade 60/70. track coat shall be used at the rate of 3.7 liters % sft)0.4 liters . sq meter) mixed with emulsifying agent at 70 C. using uniformly pressure spray distributor/ boiler with automatic temperature controller, prior to the application , earth/ rubbish stacked on the existing road surface shall be scarified/ excavated up to the depth of 6" the road surface shall be clean by brush and blower in such a way that the surface shall be free from dust and dirt and disposal the all kind of excavated material within three miles, after application traffic shall be kept off and the surface must be in thickly condition till the laying of bituminous course, bitumen course must me laid after 2 to 4 hours of tack coat application, material and methodology shall fully comply the tests of specification by the engineer in-charge (NSR)	sft	9.54	134506.699	1283193.908
22	2: (50mm) thick asphalt concrete wearing course plant mix (shedule of rates Highways work 2012) Item # 24 pg # 10	sft	82.747	134506.699	11130025.82
	TOTAL				**41168044.02**

SCHEDULE ITEM (AMOUNTING TO RS.34821898)
ABOVE 15 % **5223285.00**

TOTAL AMOUNT OF CIVIL WORK **46391329**

LARKANA

LARKANA SITE VISIT

Meeting with Deputy Commissioner Larkana & DSP Traffic was held on 03-01-2019 at D.C office larkana regarding finalization of Traffic Signals at intersection (within the city) which will be installed. On this regard survey and design work of following five intersections of larkana mutually agreed by all concerns.

Intersection Names:

1. Taluka Police Station
2. Qamber Road Chowk
3. Chandka Chowk
4. City Medical Centre
5. Sheikh Zaid Hospital Chowk

SITE VISIT AT LARKANA








9/1/19

LIST OF NEW TRAFFIC SIGNALS INSTALLED IN LARKANA

S.NO	NAME OF INTERSECTION
1	TALUKA POLICE STATION
2	KAMBER ROAD CHOWK
3	CHANDKA CHOWK
4	CITY MEDICAL CENTRE CHOWK
5	SUBHANULLAH CHOWK

SUMMARY OF LARKANA INTERSECTIONS

S.NO	NAME OF INTERSECTION	ORIGINAL PC-1 SIGNAL WORK AMOUNT	Page-No	ORIGINAL PC-1 CIVIL WORK AMOUNT	Page-No	ORIGINAL PC-1 CIVIL WORK AMT	REVISE PC-1 CIVIL WORK AMOUNT
	NEW DARO CHOWK	2225750				1001698	
	BANK SQAUARE	1654750				1001698	
1	CHANDKA CHOWK	2225750	210	504550	215	1001698	35392.3
2	CITY MEDICAL CENTRE	2225750	211	1118214	215	1001698	27251.76
3	TALUKA POLICE STATION	2225750	212	1354714	215	1001698	27251.76
4	SUBHANALLAH CHOWK		213	910050	215		21475.1
5	KAMBER ROAD		214	623050			NIL
	TOTAL	**10557750**		**4510578**		**5008490**	**111371**

209

TOTAL RVISE AMOUNT OF SIGNALIZATION WORK **4510578**

TOTAL REVISE AMOUNT OF CIVIL WORK **111371**

TOTAL COST **4621949**

209/A

LARKANO SIGNALS WORK

COST ESTIMATES

ESTIMATE CHANDKA CHOWK LARKANA

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	30	650	METER	19500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	1	7400	NOS	7400
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING		15000	NOS	0
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	80	550	METER	44000
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	2	35000	NOS	70000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	65000	NOS	130000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	1	24000	NOS	24000
	TOTAL				**504550**

ESTIMATE CITY MEDICAL CENTRE LARKANA

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	70	650	METER	45500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	12	747	METER	8964
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	4	7400	NOS	29600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	30	550	METER	16500
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	8	35000	NOS	280000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	54000	NOS	432000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	24000	NOS	96000
	TOTAL				**1118214**

ESTIMATE TALUKA POLICE STATION LARKANA

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	70	650	METER	45500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	12	747	METER	8964
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	4	7400	NOS	29600
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	300	550	METER	165000
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	8	35000	NOS	280000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	65000	NOS	520000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	4	24000	NOS	96000
	TOTAL				**1354714**

ESTIMATE SUBHANULLAH CHOWK LARKANA

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	50	650	METER	32500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	1	7400	NOS	7400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	270	550	METER	148500
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	4	35000	NOS	140000
E-7	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	22000	NOS	88000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	4	65000	NOS	260000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	1	24000	NOS	24000
	TOTAL				**910050**

ESTIMATE KAMBER ROAD LARKANA

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	50	650	METER	32500
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	1	7400	NOS	7400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	550	METER	27500
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	35000	NOS	105000
E-7	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	22000	NOS	22000
E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	65000	NOS	195000
E-9	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	1	24000	NOS	24000
	TOTAL				**623050**

214/A

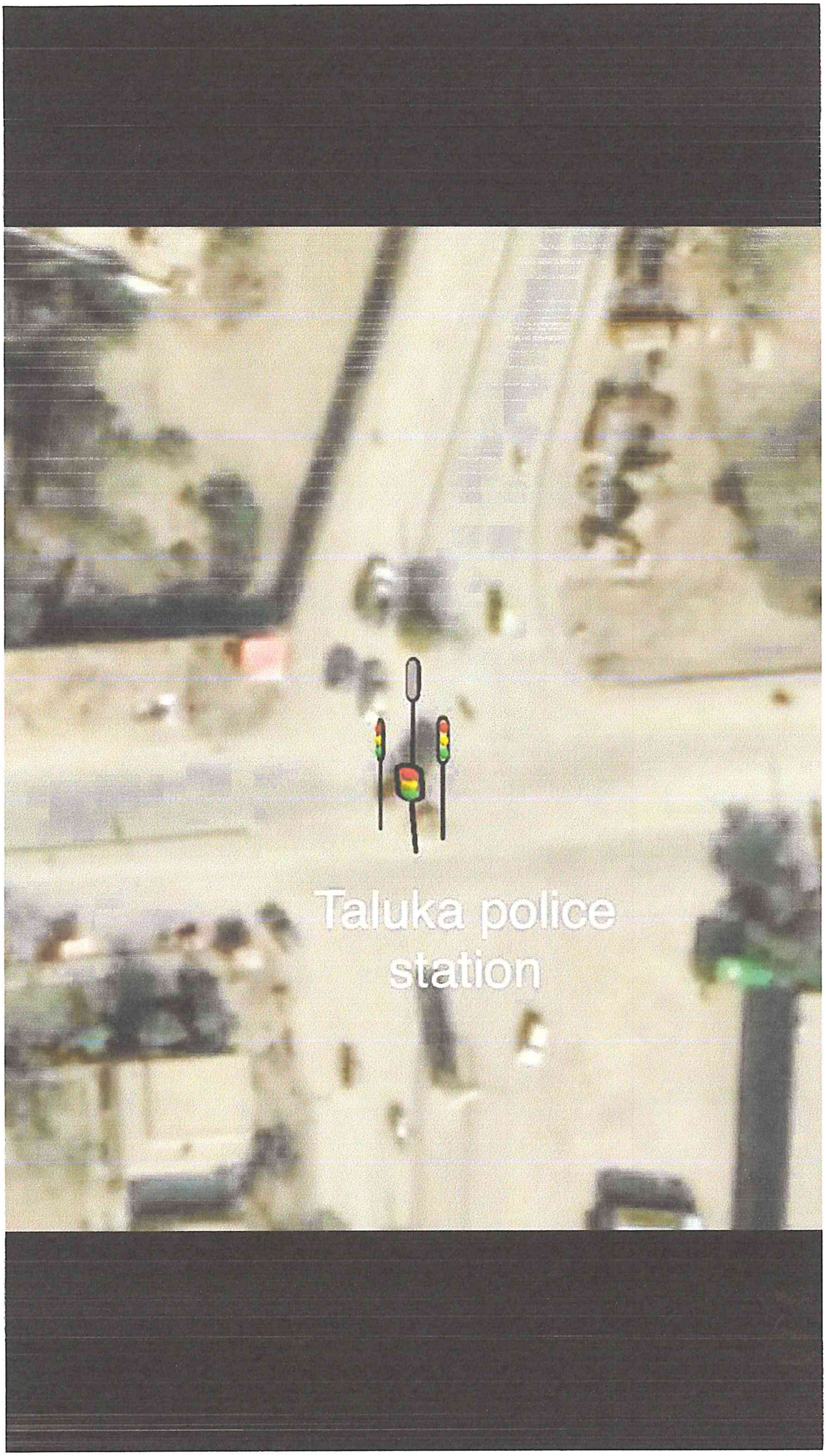
LARKANO

CIVIL WORK

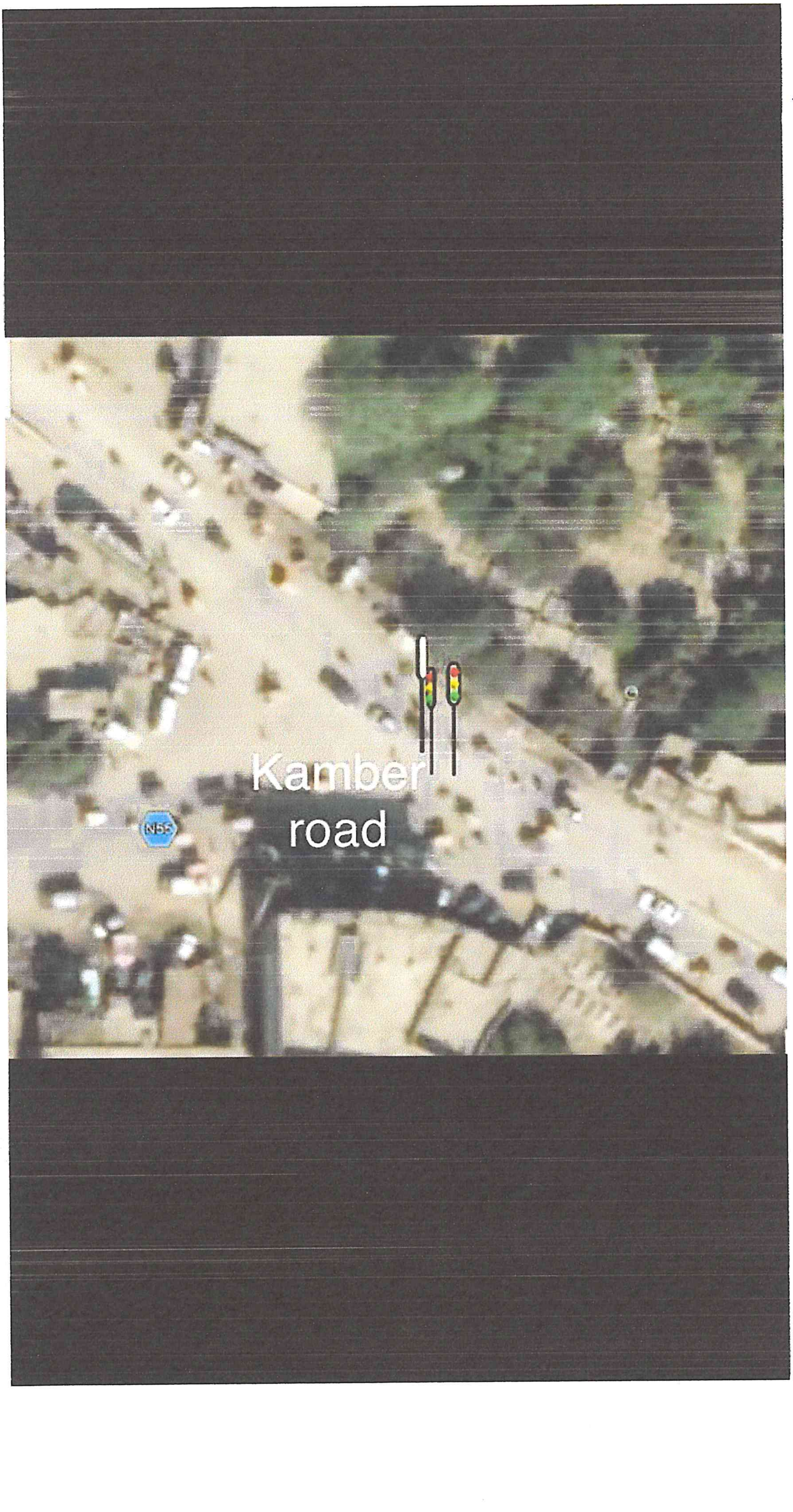
COST ESTIMATES

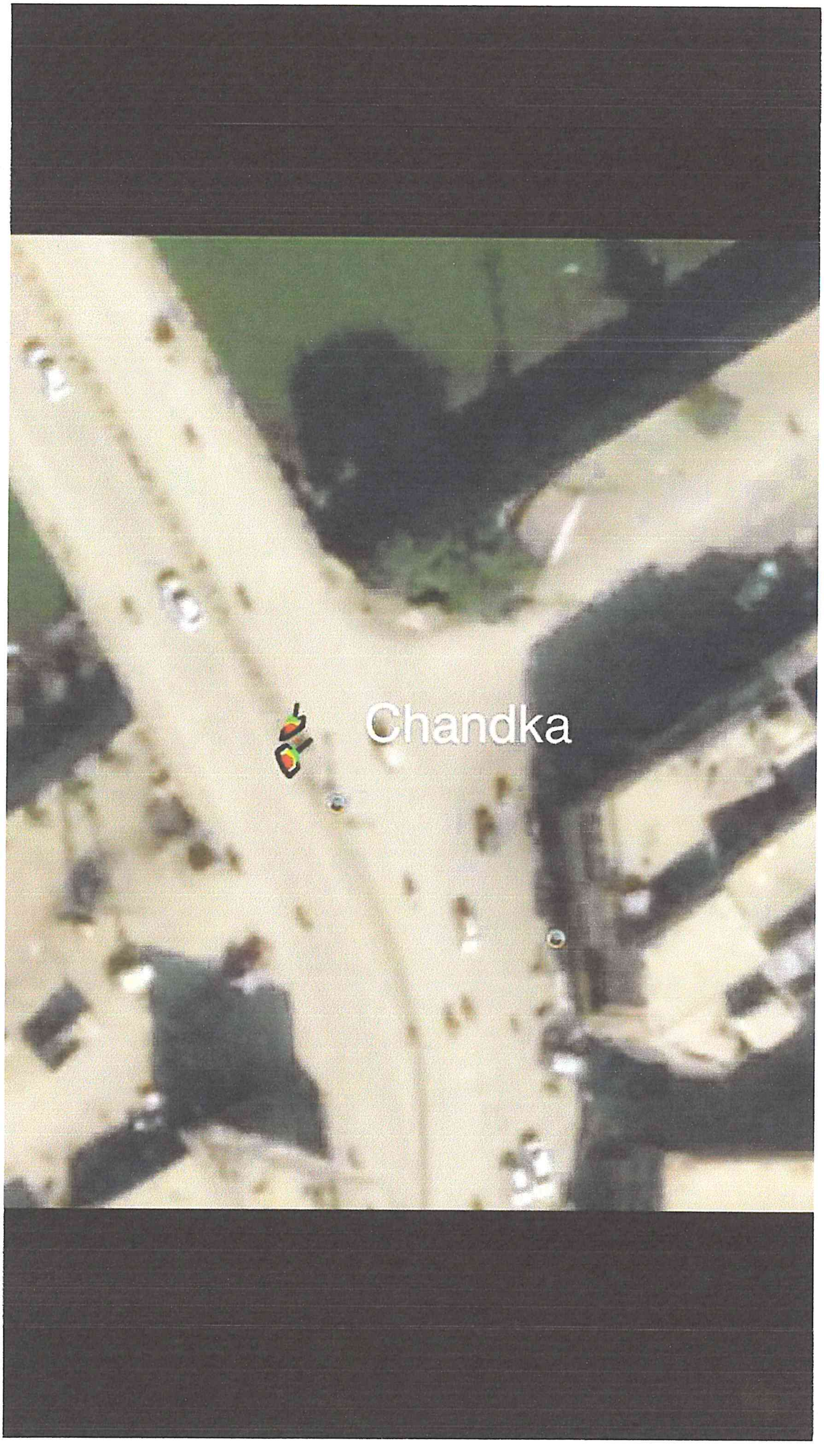
S. NO	DESCRIPTION	Unit	Chandka Chowk	City Medical	Taluka Police Station	Subhanallah Chowk	Total QTY	Rate	Amount
					LARKANA				
1	**Excavation** for foundation of building, bridges and other structures	CFt	30	21	21	18	90	22.23	**2,000.70**
2	P/F **PRECAST KERB**	Rft	40	28	28	24	120	297.01	**35,641.20**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	108	88	88	66	350	199.77	**69,919.50**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt						1200.2 42	- -
5	Stone Soling	CFT						125.95	-
6	PCC 1:3:6	CFT						349	-
7	RCC 1:1.5:3	CFT						100	-
8	Steel Reinfrorcement	KG						33.275	-
9	Dismantling of cement concrete road	CFt						5.2628	-
10	Preparing **sub grade**	SFt						33.4171	-
11	P/L **sub base** Etc	CFt						55.4224	-
12	P/L **Aggregate base course** Etc	CFt						13.55	-
13	Excavation in slushy, daldaly and disposal	CFT							
14	**Painting** with enamel paint of approved quality	SFt	60	42	42	36	180	21.1641	**3,809.54**
15	P/l **Pavement marking 2mm Thick**	SFt						117	-
16	Supplying and fixing of **reflectorize road** studs	Each						596.23	-
17	Providing and spraying **Prime Coat**	Sft						14.29	-
18	Applying TACK Coat	Sft						9.54	-
19	2" (50 mm) Thick Asphalt	Sft						82.747	-
							TOTAL AMOUNT		111,370.938

215


Taluka police
station

217




Chandka

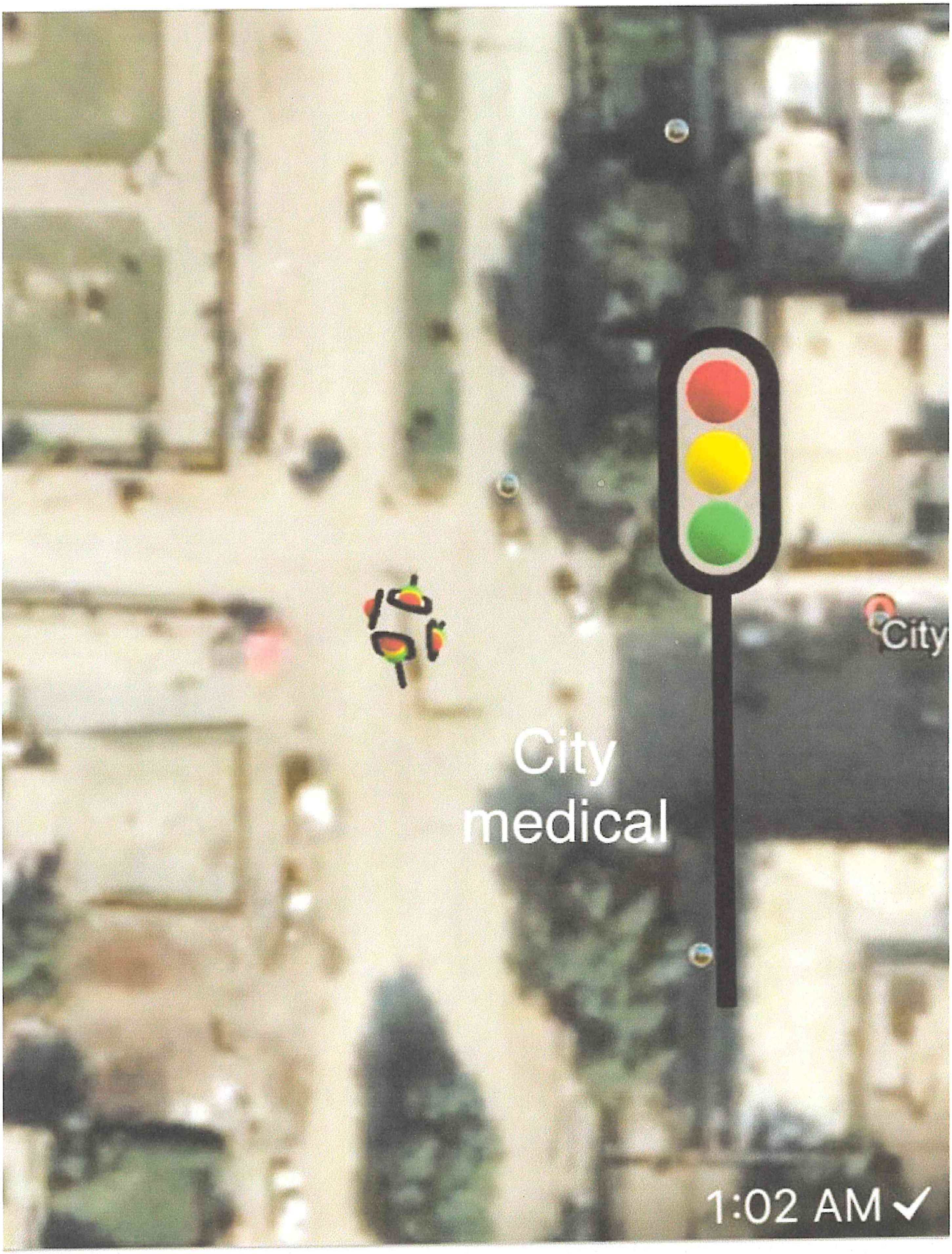
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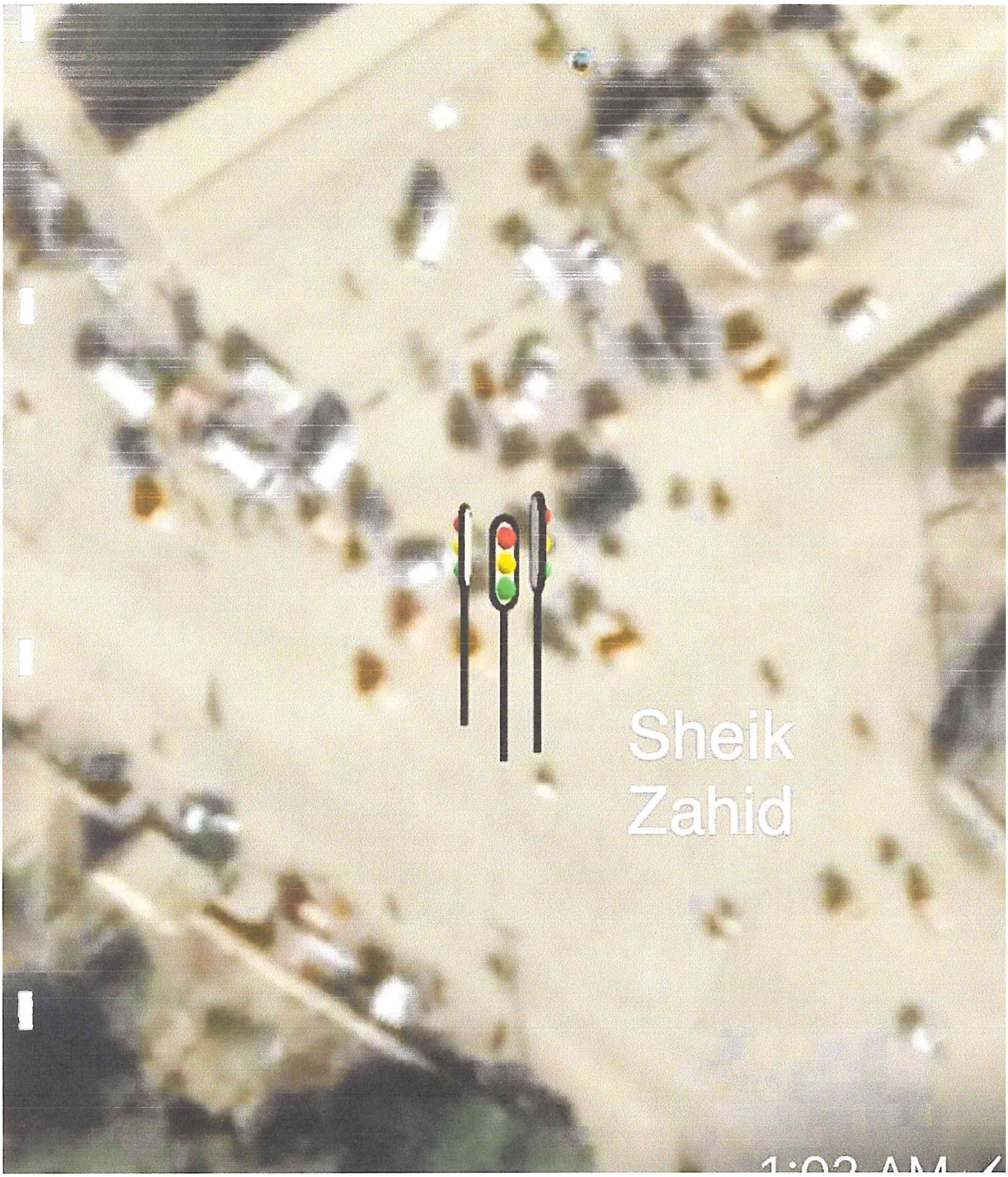
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12 Photos

Select




Sheik
Zahid

Page 220 A

No. SMTA/INFRA/SIG/2020/1132
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORITY

Karachi, Dated 21/07/2020

REMINDER-1

The Mayor,
Municipal Corporation Larkano.

Subject: **HANDING OVER THE INSTALLED TRAFFIC SIGNALS IN LARKANO UNDER THE SCHEME NAME INSTALLATION / UPGRADATION OF TRAFFIC SIGNALS IN LARKANO DURING CURRENT FINANCIAL YEAR 2018-19 UNDER ADP SCHEME NO. 1863.**

This is with reference to our **letter** No. SMTA/INFRA/SIG/2019/1682 dated 10th **December 2019** on the above cited subject.

2. It is once again apprised that the Transport and Mass Transit Department, Government of Sindh has undertaken the installation/up-gradation work of traffic signals in Karachi, Sukkur, Larkano and Mirpurkhas districts of Sindh in order to resolve traffic regulatory issues and safety of pedestrians.

3. The installation of traffic signals at five (05) locations in Larakno was completed in March 2019 as per standards/specifications. Various joint site visits along with concerned department's officers were held (during and after completion of work) whereas in September 2019 the necessary traffic signals equipment training was also given to the concerned traffic police department (GoS).

4. It is surely stated that the traffic signals installed in Larkano at five (05) locations are operational since last year and since then this office has been requesting District Municipal Office (Larkano) for the necessary handing over / taking over the traffic signals installed by SMTA (GoS) as under mentioned locations.

- i) **Taluka Police Station Chowk, Larkano**
- ii) **City Medical Center Chowk, Larkano**
- iii) **Qambar Road Chowk, Larkano**
- iv) **Subhan Allah Chowk, Larkano**
- v) **Chandka Chowk, Larkano**

5. The monitoring team of Planning and Development Department (GoS), vide **letter** No. **RMEO/LARKANA/2020/365, Dated 5.3.2020** has recently conducted the joint site visit at the above locations at Larkano along with SMTA officials and they satisfied the works executed at sites (**photographs are attached Annexure-A**).

6. It is regretfully stated that after fulfillment of all formalities and satisfactory work done, the concerned department i.e. District Municipal Corporation (Larkano) does not cooperate in handing/taking over the subject work which is very essential for maintenance and operational purpose of traffic signals.

7. It is once again requested to instruct the concerned department officer to extend cooperation in handing/taking over the traffic signals installed in District Larkano so that they may operate then in the best interest of public.

8. This is for your kind information and further necessary instructions to the concerned department with intimation to this office. **(All concerned documents are attached again in Annexure-B)**

MANAGING DIRECTOR
(Sindh Mass Transit Authority)

Copy to:-

1. The Project Director, Signals, GoS,
2. Director, Infrastructure/ Projects, Sindh Mass Transit Authority, GoS, Karachi.
3. PS to Minister, Transport & Mass Transit, Sindh
4. PS to Secretary, Transport & Mass Transit Department, GoS, Karachi
5. PS to Municipal Commissioner Larkano Municipal Corporation.
6. Master File.

No. SMTA/INFRA/SIG/2019/1682
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 10-12, 2019

To,

The Mayor
District Larkano.

SUBJECT: **HANDING OVER THE INSTALLED TRAFFIC SIGNALS IN LARKANO UNDER THE SCHEME NAME INSTALLATION/UP-GRADATION OF TRAFFFIC SIGNALS IN LARKANO DURING CURRENT FINANCIAL YEAR 2018-19 UNDER ADP SCHEME NO 1863.**

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority [SMTA] has undertaken the Installation/up-gradation work of traffic signals in Karachi including other districts of Sindh under ADP Scheme No.1863 to resolve traffic regulatory issues and safety of pedestrian. In this regard, M/S Silicon Communication security JV Ghause Builders (Selected through Competitive Bidding Process) has completed the Installation work of New Traffic Signals at 5 locations in Larkano as per given specifications. In this regard, SMTA requested to Mayor Municipal Corporation or Deputy Commissioner Larkano, to direct concerns department to check and take-over the under mentioned traffic signals for further maintenance and look-after. The undertaking papers are attached along with this letter.

Inventory of the traffic signals systems attached as **Annexure-"A".**

S. No.	NAME OF SIGNALIZED INTERSECTION AT LARKANO BY SMTA, GOS.
1.	Taluka Police Station Chowk Larkano
2.	City Medical Centre Chowk Larkano
3.	Qamber Road Chowk Larkano
4.	Subhanallah Chowk Larkano
5	Chandka Chowk Larkano

EXECUTIVE ENGINEER
Sindh Mass Transit Authority
Government of Sindh

Copy to:

1. The Managing Director, Sindh Mass Transit Authority, Government of Sindh, Karachi
2. The Director Infrastructure / Project, Sindh Mass Transit Authority, Government of Sindh, Karachi
3. The PS to Minister, Transport & Mass Transit, Sindh
4. The PS to Chairman, Planning & Development Department , Government of Sindh, Karachi
5. The PS to Secretary, Transport & Mass Transit Department, Government of Sindh, Karachi
6. To Concerned Department.
7. Master File.

A

SILICON COMMUNICATION AND SECURITY (LARKANA)

All the five chowk is visited by WPC Arbab and confirm that all the signals is in working condition.

Sign.

BAM 16/9

Engr. Babar Ali Mirza
(Company Representator)

The required software necessary to operate and change the traffic signal intersection timing is installed in the Laptop EliteBook 8460p and training is also given by PC Riaz Ali.

BAM 19/9

Babar Ali Mirza

PC Riaz Ali

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 16/08/2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	2 WAY TRAFFIC SINGLAS CHANDKA INTERSECTION LARKANO CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NOS
STANDARD POLE 16 FEET HEIGHT	01 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	02 NOS
DUAL COLOUR COUNT DOWN TIMER	02 NOS
SINGIL FACE ELECTRIC METER (S-37970107-19)	01 NOS

TAKING OVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

HANDING OVER
DISTRICT GOVERNMENT LARKANO

DATED.

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 16/09, 2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	4 WAY TRAFFIC SIGNALS SUBHANULLAH INTERSECTION LARKANO CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NO
STANDARD POLE 16 FEET HEIGHT	01 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	04 NOS
1-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	04 NOS
DUAL COLOUR COUNT DOWN TIMER	04 NOS
SINGIL FACE ELECTRICT METER (S-3797010599)	01NOS

TAKING OVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

HANDING OVER
DISTRICT GOVERNMENT LARKANO

DATED.

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 16/09, 2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	4 WAY TRAFFIC SIGNALS INTERSECTION TALUKA POLICE STATION LARKANO CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NO
STANDARD POLE 16 FEET HEIGHT	04 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	08 NOS
DUAL COLOUR COUNT DOWN TIMER	08 NOS
SINGIL FACE ELECTRICT METER S(-37970135 75)	01NOS

TAKING OVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

HANDING OVER
DISTRICT GOVERNMENT LARKANO

DATED. 16/9/2019.

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 16/09, 2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

CUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION.	4 WAY TRAFFIC SIGNALSCITY MEDICAL CENTRE
INTERSECTION	LARKANO

DETAILS OF EQUIPMENT

CONTROLLER	01 NOS
STANDARD POLE 16 FEET HEIGHT	04 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	08 NOS
DUAL COLOUR COUNT DOWN TIMER	08 NOS
SINGLEPHASE ELECTRIC METER (S-3797013573)	01 NOS

TAKING OVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

HANDING OVER
DISTRICT GOVERNMENT LARKANO

DATED.

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 16/09, 2019

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

COUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	3 WAY TRAFFIC SIGNALS QAMBER ROAD INTERSECTION LARKANO CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NO
STANDARD POLE 16 FEET HEIGHT	01 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	03 NOS
1 WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	01 NOS
DUAL COLOUR COUNT DOWN TIMER	03 NOS
SINGIL FACE ELECTRICT METER	01NOS

TAKING OVER
SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

HANDING OVER
DISTRICT GOVERNMENT LARKANO

DATED.

Capital Cost on A/O XEN (E) LRK City

پاکستان واپڈا

(برقیات)

10 / 936

4/4/2017

28 38221 - 0035548

NBP Bank

XEN LRK City

4/4/17

160

New

A III

Domestic

1.00

220

A III

ڈیمانڈ نوٹس

Chief Officer Municipal Committee ... Police Station ... Chowk ... Larkana

15 days

1000/-

(1 Thousand ...)

2000/-

Utility Bills

Sub-Divisional Officer
Operation Sub-Division SEPCO
Shaikh Zaid Larkana

Received

25/4/17

Sub-Divisional Officer
Oper: Sub-Division [illegible]
Shaikh Zaid Larkana

Copy to XEN(E) KRL city

350/19
25/03/19

163
30-3-19

NPW

A III

28, 38226 — 24608

Domestic

1000

220

A III

NAT Bank S91

XEN (E) KRL

M/s Municipal Committee Lalazar
R/O: Traffic signals Chandha pull / AL-Mansoor Hotel

15 days

4100/-

(For: Lalazar only)

4000/-

Utility Bills
15 APR 2019

24/04/19

350
25/3/19

Security deposit on n/o R.O(E) VRK city.

663
22-3-19

New

A III

Domestic

1-00

22-0

A III

28-38226-07 24608

NBP Bank SSL

R.O(E) VRK city

ڈیمانڈ نوٹس

M/S. M/S Larkana Municipal ... R/O M/S Sindh chandka pull Ali Mansoor Hotel

15

120/-

120/-

Sub-Divisional Officer
Opr. Sub-Division
SEPCO Chandka Larkana

25 APR 2019

Branch

Security Deposit ... R/O

4/4/19

139

New

Damage ...

1-00

2-2-0

A-III

28-3832-0035545

Misc. R-0(E)

Mayor Larkana Municipal Corporation
R/o Traffic Signals city Medical Co...

15 kg

1220/-

(Twelve hundred twenty only) 1220/-

Sub-Divisional Officer
Oper: Sub-Division SAPCO
Shaikh Zaid Larkana

349

25 | 03 | 19

New

A3

Domestic

1-00

220

A111

Capital ...

NBP Bank ...

XEN (E) ...

ڈیمانڈ نوٹس

... Larkana Municipal Corp. Larkana

R/O Near Subhanullah Hotel Larkana

15 days

4000/-

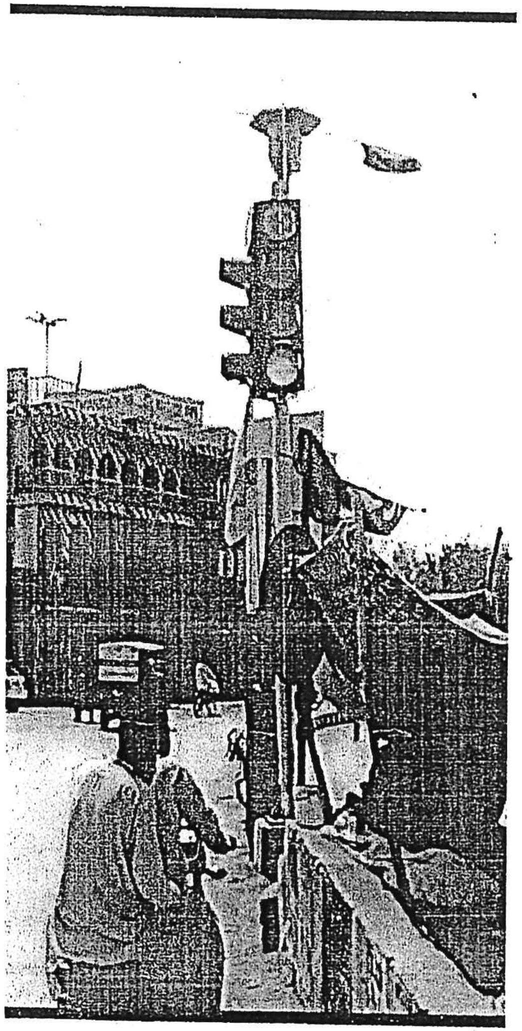
(Four Thousand only)

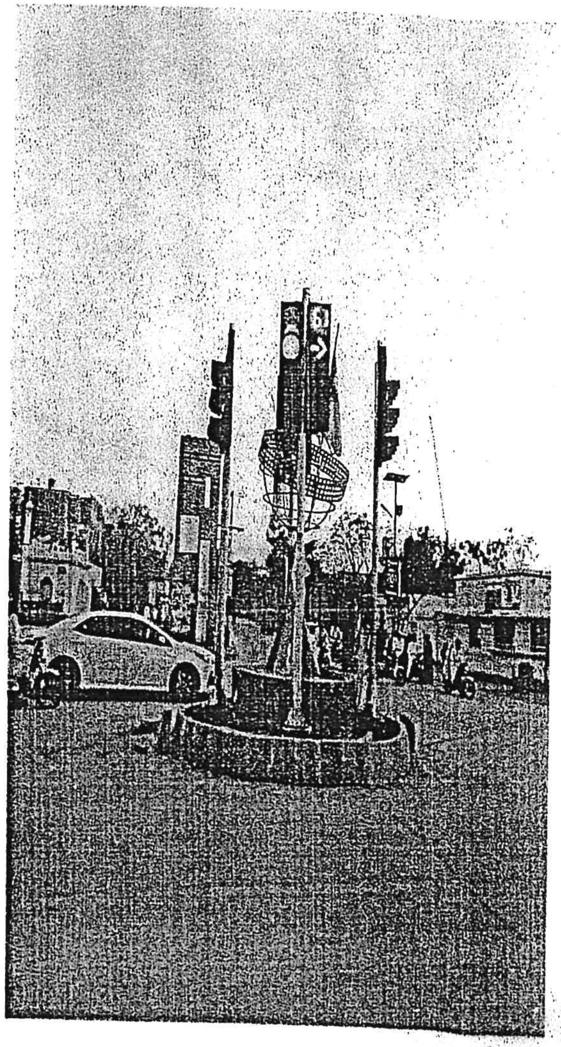
4000/-

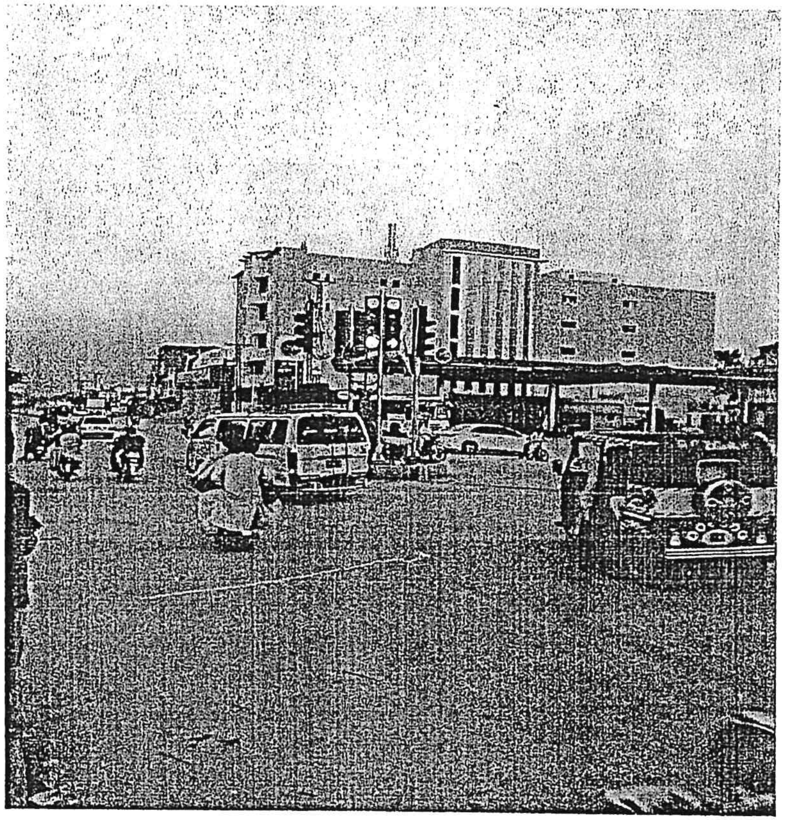
Sub Divisional Officer

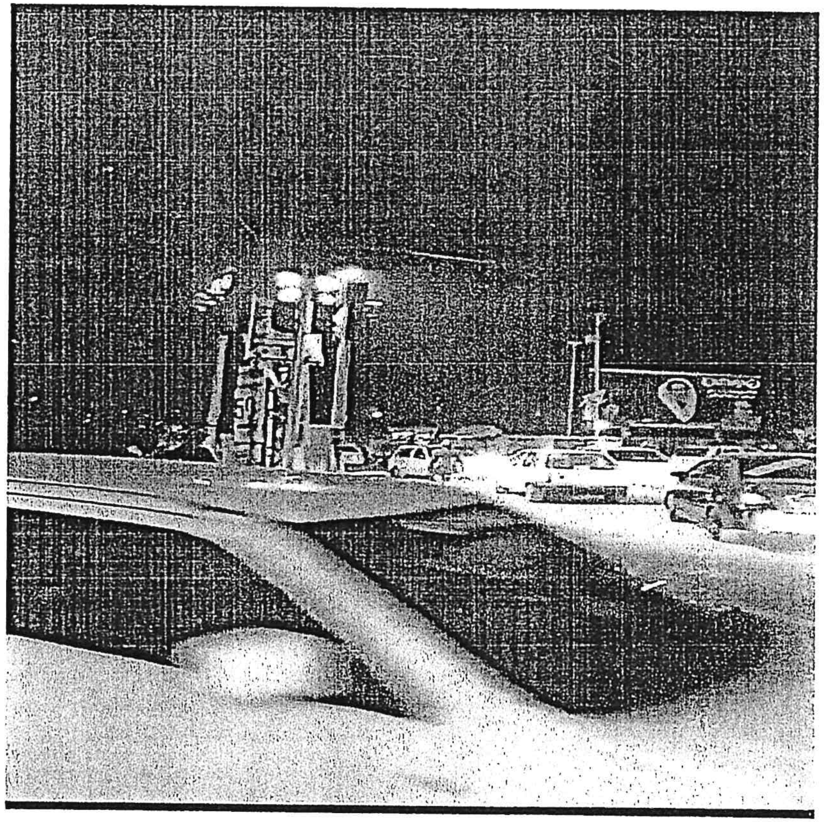
NEW INSTALLATION LARKANA PICTORIAL

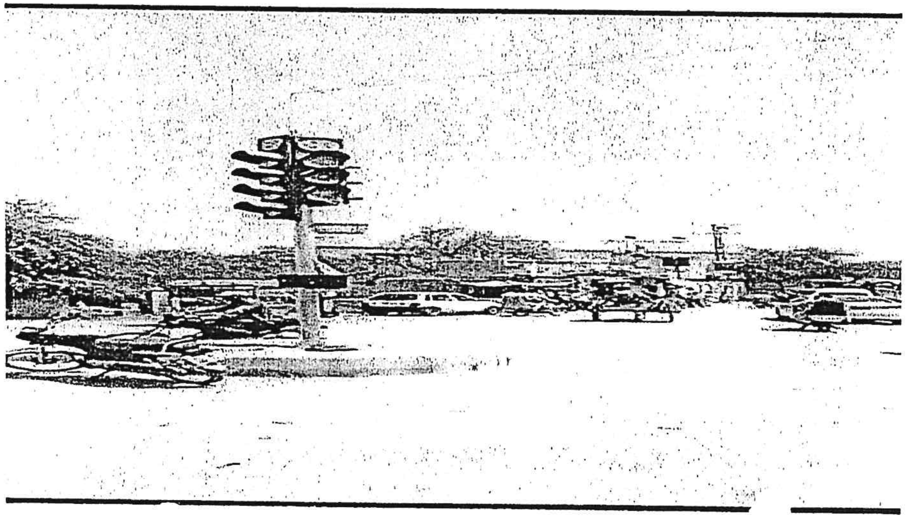


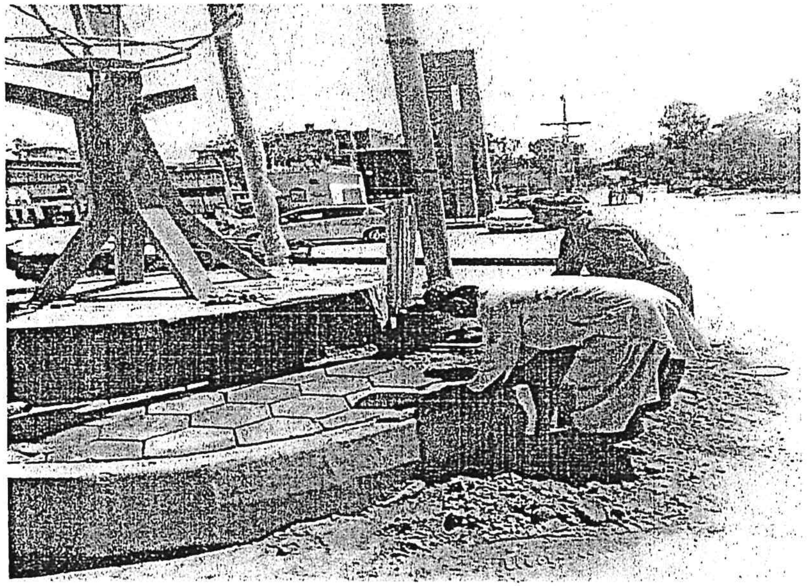


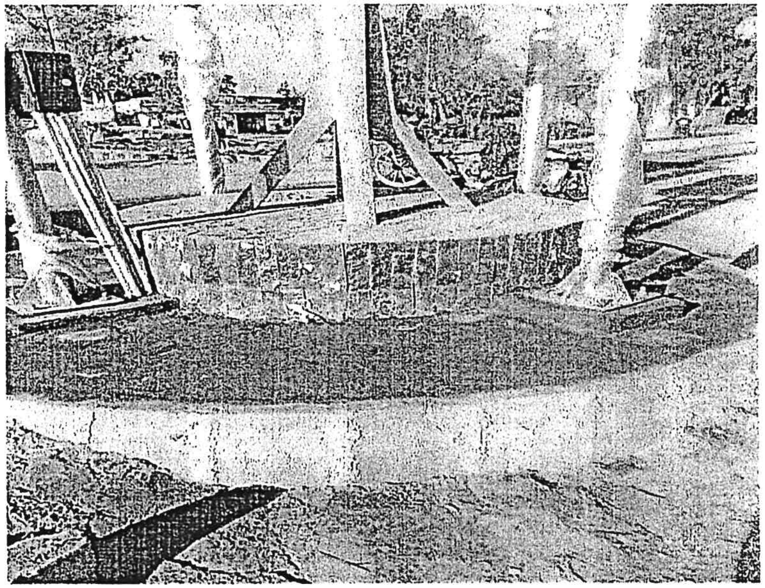


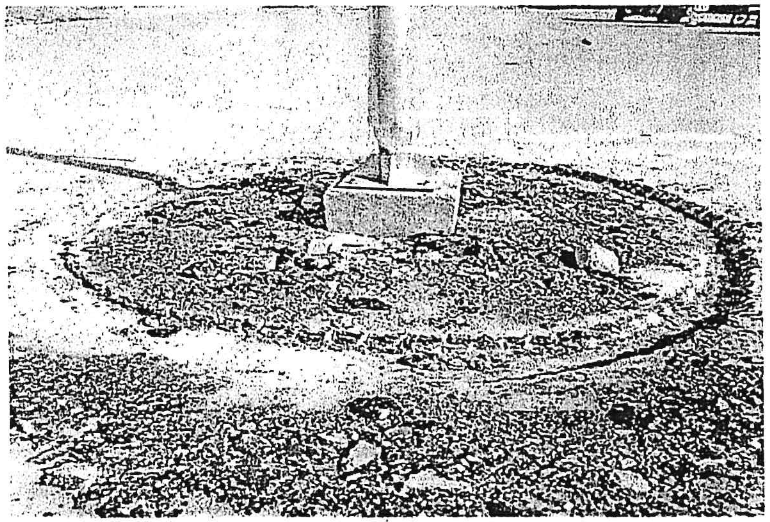


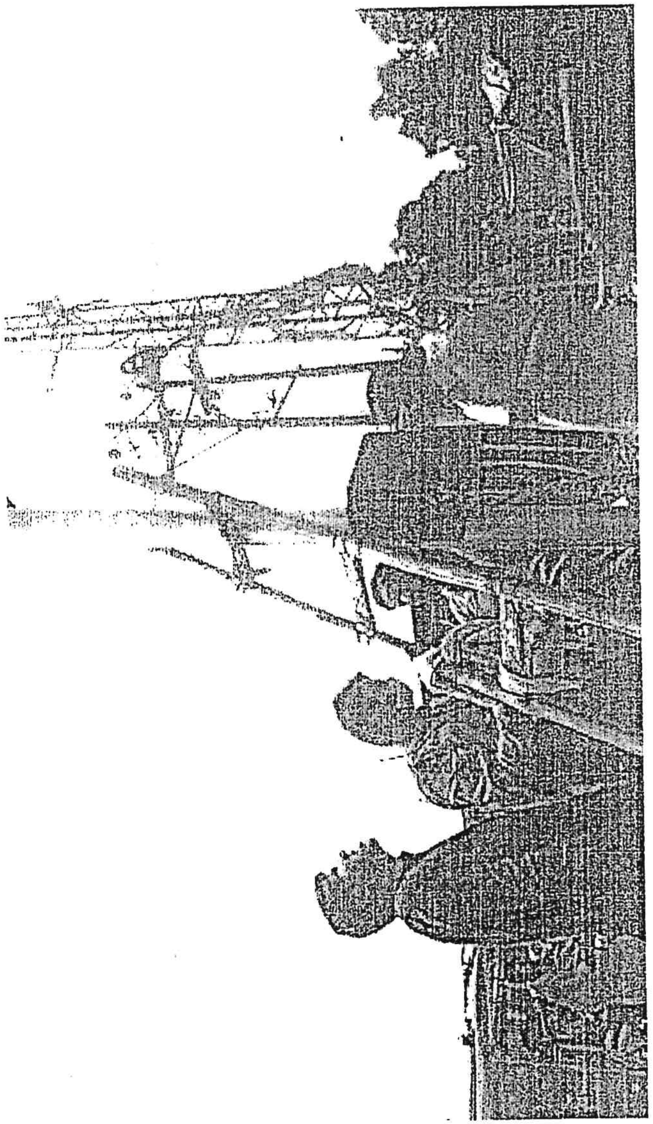




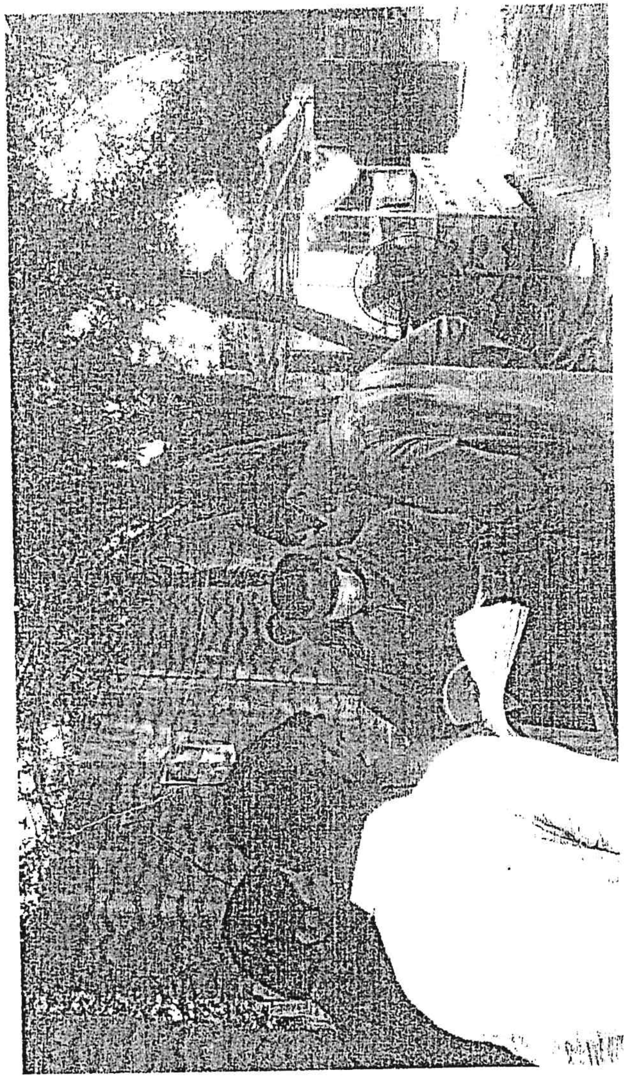


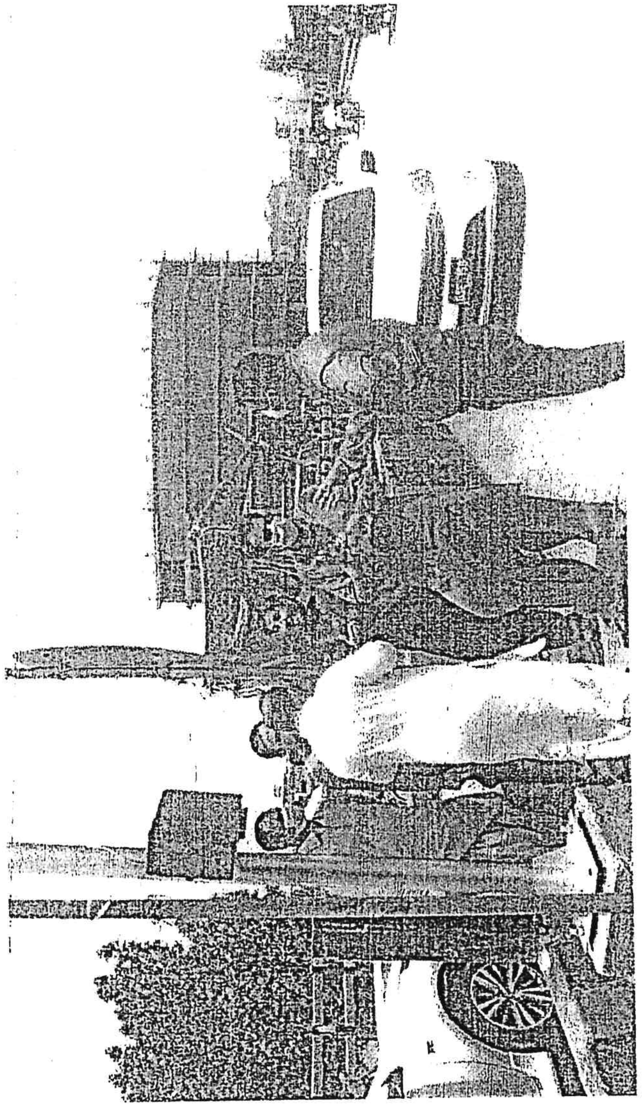












No. D(ADMIN&HR)LT/2018/118 /1386
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Signals (0)

Karachi, dated the 13 May, 2019

To,

The Deputy Commissioner,
Larkano District.

SUBJECT: HANDING OVER NEW TRAFFIC SIGNALS INSTALLED IN LARKANO DURING CURRENT FINANCIAL YEAR 2018-19 UNDER ADP SCHEME NO. 1863.

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority [SMTA] has undertaken the Installation/up-gradation work in Karachi, Larkano, Sukkur and Mirpur Khas districts in Sindh under ADP Scheme No.1863 to solve traffic regulatory issues including traffic congestion particularly at intersections. In this regard, M/S Silicon Communication security JV Ghause Builders (Selected through Competitive Bidding Process) has completed the Installation work in Larkano on 27th March 2019 as per given specifications. Following intersection/signals were installed by SMTA are being handed over to Deputy Commissioner Larkano for onward handing over to Mayor Municipal Corporation Larkano, Government of Sindh for undertaking onward operational and maintenance of the system.

Inventory of the traffic signal systems attached as **Annexure-"A"**.

Sr. No.	**05 number of traffic signals at following locations at Larkano by Sindh Mass Transit Authority, Government of Sindh.**
1.	Taluka Police Station Chowk Larkano.
2.	City Medical Centre Chowk Larkano.
3.	Qamber Road Chowk Larkano.
4.	Subhanallah Chowk Larkano.
5	Chandka Chowk Larkano.

Considering the importance of the subject matter please nominate the focal person at your end and also propose date on which handing over / taking over to be made properly.

15/05/19
1526

Moreover Syed Khan Muhammad Shah, Executive Engineer, SMTA has been nominated by the Competent Authority to hand over New Traffic Signals on the behalf of SMTA, Government of Sindh.

SHEHERYAR ABBASI
DIRECTOR (ADMIN & HR)

CC to:

1. The Managing Director, SMTA, Govt. of Sindh.
2. The Deputy Managing Director, SMTA, Govt. of Sindh.
3. The Director Infrastructure / Project, SMTA, Govt. of Sindh.
4. Project Director, PMU(Signals), SMTA, Govt. of Sindh.
5. PS to Minister Transport & Mass Transit, Sindh.
6. PS to Chairman Planning & Development Board, Govt. of Sindh.
7. PS to Secretary, Transport & Mass Transit Department, Govt. of Sindh.
8. Master File.

No. SMTA/INFRA/SIG/2020/1732
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORITY

Karachi, Dated 21/07/2020

REMINDER-1

The Mayor,
Municipal Corporation Larkano.

Subject: **HANDING OVER THE INSTALLED TRAFFIC SIGNALS IN LARKANO UNDER THE SCHEME NAME INSTALLATION / UPGRADATION OF TRAFFIC SIGNALS IN LARKANO DURING CURRENT FINANCIAL YEAR 2018-19 UNDER ADP SCHEME NO. 1863.**

This is with reference to our letter No. SMTA/INFRA/SIG/2019/1682 dated 10th **December 2019** on the above cited subject.

2. It is once again apprised that the Transport and Mass Transit Department, Government of Sindh has undertaken the installation/up-gradation work of traffic signals in Karachi, Sukkur, Larkano and Mirpurkhas districts of Sindh in order to resolve traffic regulatory issues and safety of pedestrians.

3. The installation of traffic signals at five (05) locations in Larakno was completed in March 2019 as per standards/specifications. Various joint site visits along with concerned department's officers were held (during and after completion of work) whereas in September 2019 the necessary traffic signals equipment training was also given to the concerned traffic police department (GoS).

4. It is surely stated that the traffic signals installed in Larkano at five (05) locations are operational since last year and since then this office has been requesting District Municipal Office (Larkano) for the necessary handing over / taking over the traffic signals installed by SMTA (GoS) as under mentioned locations.

i) Taluka Police Station Chowk, Larkano
ii) City Medical Center Chowk, Larkano
iii) Qambar Road Chowk, Larkano
iv) Subhan Allah Chowk, Larkano
v) Chandka Chowk, Larkano

5. The monitoring team of Planning and Development Department (GoS), vide letter No. RMEO/LARKANA/2020/365, Dated 5.3.2020 has recently conducted the joint site visit at the above locations at Larkano along with SMTA officials and they satisfied the works executed at sites (**photographs are attached Annexure-A**).

6. It is regretfully stated that after fulfillment of all formalities and satisfactory work done, the concerned department i.e. District Municipal Corporation (Larkano) does not cooperate in handing/taking over the subject work which is very essential for maintenance and operational purpose of traffic signals.

7. It is once again requested to instruct the concerned department officer to extend cooperation in handing/taking over the traffic signals installed in District Larkano so that they may operate then in the best interest of public.

8. This is for your kind information and further necessary instructions to the concerned department with intimation to this office. (**All concerned documents are attached again in Annexure-B**)

MANAGING DIRECTOR
(Sindh Mass Transit Authority)

Copy to:-

1. The Project Director, Signals, GoS,
2. Director, Infrastructure/ Projects, Sindh Mass Transit Authority, GoS, Karachi.
3. PS to Minister, Transport & Mass Transit, Sindh
4. PS to Secretary, Transport & Mass Transit Department, GoS, Karachi
5. PS to Municipal Commissioner Larkano Municipal Corporation.
6. Master File.

No. SMTA/INFRA/SIG/2019/1682
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the 10-12, 2019

To,

The Mayor
District Larkano.

SUBJECT: **HANDING OVER THE INSTALLED TRAFFIC SIGNALS IN LARKANO UNDER THE SCHEME NAME INSTALLATION/UP-GRADATION OF TRAFFFIC SIGNALS IN LARKANO DURING CURRENT FINANCIAL YEAR 2018-19 UNDER ADP SCHEME NO 1863.**

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority [SMTA] has undertaken the Installation/up-gradation work of traffic signals in Karachi including other districts of Sindh under ADP Scheme No.1863 to resolve traffic regulatory issues and safety of pedestrian. In this regard, M/S Silicon Communication security JV Ghause Builders (Selected through Competitive Bidding Process) has completed the Installation work of New Traffic Signals at 5 locations in Larkano as per given specifications. In this regard, SMTA requested to Mayor Municipal Corporation or Deputy Commissioner Larkano, to direct concerns department to check and take-over the under mentioned traffic signals for further maintenance and look-after. The undertaking papers are attached along with this letter.

Inventory of the traffic signals systems attached as Annexure-"A".

S. No.	NAME OF SIGNALIZED INTERSECTION AT LARKANO BY SMTA, GOS.
1.	Taluka Police Station Chowk Larkano
2.	City Medical Centre Chowk Larkano
3.	Qamber Road Chowk Larkano
4.	Subhanallah Chowk Larkano
5	Chandka Chowk Larkano

EXECUTIVE ENGINEER
Sindh Mass Transit Authority
Government of Sindh

Copy to:

1. The Managing Director, Sindh Mass Transit Authority, Government of Sindh, Karachi
2. The Director Infrastructure / Project, Sindh Mass Transit Authority, Government of Sindh, Karachi
3. The PS to Minister, Transport & Mass Transit, Sindh
4. The PS to Chairman, Planning & Development Department, Government of Sindh, Karachi
5. The PS to Secretary, Transport & Mass Transit Department, Government of Sindh, Karachi
6. To Concerned Department.
7. Master File.

Signals

No. SMTA/INFRA/SIG/2022/L-639
GOVERNMENT OF SINDH
SINDH MASS TRANSIT AUTHORTY
Karachi, Dated 18/01 2022

To
The Administrator
Municipal Corporation Larkano

Subject: HANDING OVER THE INSTALLED TRAFFIC SIGNALS IN LARKANO UNDER THE SCHEMEM NAME INSTALLATION / UPGRADATION OF TRAFFIC SIGNALS IN LARKANO DURIN FINANCIAL YEAR 2021-22 UNDER ADP SCHEME NO 1863.

Please refer to the following letter from the office (also attached herewith).

1. D(ADMIN&HR)LT/2018/118/1386 Dated 13 May,2019
2. SMTA/INFRA/SIG/2019/1682 Dated 10 Dec, 2019.
3. SMTA/INFRA/SIG/2020/1932 Dated 21 July 2020.

2. I am directed to refer to the subjected noted above , it is apprised that the Transport and Mass Transit Department, Government of Sindh has undertaken the installation/up-gradation work of traffic signals in Karachi including other districts of Sindh in order to resolve traffic issues and road safety matters.

3. The installation of traffic signals at five (05) locations in Larakno was completed in March 2019 as per standards/specifications. Various joint site visits along with concerned department's officers were held (during and after completion of work) whereas in September 2019 the necessary traffic signals equipment training was also given to the concerned DSP traffic police Larkano department (GoS).

4. It is surely stated that the traffic signals installed in Larkano at five (05) locations are operational since last year and since then this office has been requesting District Municipal Office (Larkano) for the necessary handing over / taking over the traffic signals installed by SMTA (GoS) as under mentioned locations.

I. Taluka Police Station Chowk, Larkano.
II. City Medical Center Chowk, Larkano.
III. Qambar Road Chowk, Larkano.
IV. Subhan Allah Chowk, Larkano.
V. Chandka Chowk, Larkano.

5. It is however stated that despite the above mentioned letters from this office regarding handing /taking over of these traffic signals, the matter is yet to be resolved and is pending.

6. We are attaching all above mentioned letter with this letter for your review and perusal. You are requested to kindly direct the concerned officer (Municipal Officer Larkano) to start taking over the above mentioned traffic signals. This is very important in order to ensure the safety and smooth running of these traffic signals in order to facilitate the public of larkano. If the matter stays further pending, any physical harm to these traffic signals will result in loss of public exchequer.

7. A site visit to be scheduled in Larkano 25th Jan, 2022 to handover the traffic signals to Larkano Municipal Corporation, no codal formalities pending at our side; this is for your necessary action please, in the best interest of public.

18/01/22

Executive Engineer
Sindh Mass Transit Authority
Government of Sindh.

Copy to:-

1. Managing Director, SMTA
2. Director Infra/planning, SMTA
3. PS to Chairman P&D, GoS
4. PS to Secretary, TMTD, GoS
5. PD · Signals SMTA.

Page 220 B

NO: LAR-74/SMEO/(MEC)P&D/17/8834 (CI) /1088

GOVERNMENT OF SINDH
PLANNING & DEVELOPMENT DEPARTMENT
MONITORING & EVALUATION CELL
KARACHI
Dated: 12th July, 2021

To,

The Secretary Government of Sindh,
Transport and Mass Transit Department,
Karachi.

SUBJECT: **FIELD MONITORING VISIT REPORT**

I am directed to enclose here with a copy of the field monitoring visit report for your kind perusal of the **ADP # 2271 (2019-20) / 1902 (2020-21)** **(Compliance Visit) "Upgradation of Traffic Signals in Karachi, Hyderabad, Sukkur, Larkano and Mirpurkhas (Phase-I)" District Larkana** Unit only. The visit was carried out on **04-05-2021**, by the field team of MEC Regional Office Larkana.

This attached monitoring report indicates that the status of said visited scheme / unit, found **Satisfactory**. Detailed reasoning, observations and recommendations are reflected in the report for the record purpose.

It is requested that same, may kindly be perused and necessary actions on the observations / recommendations, may be taken accordingly.

Moreover, it is mandatory upon the EA to correct the shortcomings reflected in the report, complete remaining scope of work up to the mark and maintain all relevant documents in order, duly signed for the purpose of better service delivery, transparency and sustainability.

12/7/2021
(Fatehdin Junejo)
Sector Monitoring & Evaluation Officer (Infra.)

Copy for Information to:-

1. The Principal Secretary to Chief Minister Sindh, Karachi.
2. The Chairman, Planning & Development Board, Govt. of Sindh, Karachi.
3. The Secretary to Government of Sindh, Finance Department, Karachi.
4. The Chief (T&C), Planning & Development Department, Govt. of Sindh, Karachi.
5. The XEN, SMTC, Transport and Mass Transit Department, Larkana.
6. The RMEO (MEC), P&D Department, Govt. of Sindh, Larkana.
7. PS to DG (MEC), P&D Department, Govt. of Sindh, Karachi.
8. Master file.

COMPLIANCE REPORT

Region: Larkana

Rs.143.220 Million

	PART- A(I): PROJECT/UNIT DATA ANALYSIS						
1.	ADP No / ADP Year Name of the Project	ADP # 2271 (2019-20) / 1902 (2020-21) Upgradation of Traffic Signals in Karachi, Hyderabad, Sukkur, Larkano and Mirpurkhas (Phase-I)					
2.	Visit Location of the Project	Larkana					
3.	GPS Location	Latitude (Northing):	27.5641582349332		Longitude (Easting):	68.1974655389786	
4.	Department / Sector	TRANSPORT AND MASS TRANSIT DEPARTMENT					
5.	Executing Agency	SMTC, Government of Sindh					
6.	Consultancy Firm or Contractor Hired by E.A (if any)	-					
7.	Project Status & Date of approval	Approved & 25-01-2017					
8.	Revised Status & Revision Date (if any)	-					
9.	Completion Year as per PC-I	---	Extension in the Completion Period required by E/A (If yes than indicate Number of Months)			-	
10.	Funding Agency Share Status	GoS Share		Rs.	GoP Share	Rs.	
11.	Approved Cost of the Project	Capital	143.220 M	Revenue	00	Total	143.220 M
12.	Revised Cost of the Project (if any)	Capital	-	Revenue	-	Total	-
13.	Unit Cost of the Project (if applicable)	Capital	100	Revenue	00	Total	-
14.	Date of A.A. Issued	25-01-2017		Date of Tenders Invited		Tender was published in Daily (Dawn, Jang, Kawish) on 27-04-2017 and uploaded on SPPRA as well.	
15.	Date of Work Award	06-02-2018					
16 (i)	Financial Progress (Max. 5 Years) of Scheme	2017 -18		2018 -19		2019 -20	
a.	Allocation (As Per PC-I)	143.220		143.220		143.220	
b.	Releases (as per F.D. Data)	00		71.610		107.414	
c.	Expenditure (as per F.D. Data)	00		00		35.806	
d.	Surrendered (as per E/A - If any)	00		00		-	
*16 (ii)	Financial Progress (Max. 5 Years) of Visited Site	2017 -18		2018 -19		2019 -20	
a.	Allocation (As Per PC-I)	143.220		143.220		143.220	
b.	Release Amount	00		71.610		107.414	
c.	Expenditure (as per E/A)	-		-		35.806	
d.	Surrendered (as per E/A - If any)	-		-		-	
17.	Overall Financial Progress in %	22%					
18.	Overall Physical Progress (as per E/A) in Larkana	100%					
19.	Gap Between Physical & Financial	78%					

	progress as per E/A Data in % for Larkana District			
20.	Last Visit Date (if any)	09-03-2020 & 12-01-2021	Last Visit Status (if any)	Un-Satisfactory
21.	Current Visit Date	04-05-2021 This is a Compliance Visit (No Grace Period provided)		
22.	Objectives (As Per PC-I)	Karachi the first capital of Pakistan was originally a small fishing village which attached a large number of peoples from within and outside the country in the past and was spread over few square kilometers. It expanded rapidly with passage of time and presently its population is about 18 million covering an area of 1800 square kilometers. Therefore the required proper traffic management need is increasing day by day and due to rapidly increase in motor vehicles peoples are facing heavy traffic jam on frequent basis. This problem causing increase in travel time and also creating pollution. To resolve these problems, in the first instance we have to change the controllers which are 22 years old and are obsolete. New controllers are scoot base controller and have ability to control the traffic by collecting the real time data from each intersection and gave priority where as needed resulting to resolve the traffic jam and also decrease the pollution and travel time. SUKKUR, LARKANA AND MIRPURKAHS are the small city and have historical background. But now it expanded rapidly with the passage of time. Therefore the requirement of proper traffic due to rapidly increase in motorize vehicles peoples are facing heavy traffic jam on frequent basis this problem causing increase in travel time and also creating pollution. To resolve these problems in the first instance we have conducted the joint survey along with the local authority (DC traffic police) the project is aim at reliving congestion /Improvement in the cities road network the intersection under consideration are also a part of an overall scheme of improvement of road networking in connection with traffic signals.		
23.	Scope of the Project	Up-Gradation of Traffic Signals in Karachi, Hyderabad, Sukkur, Larkana and Mirpur khas		

	COMPONENT & SUB-COMPONENT WISE BREAK-UP						
	Major item / Unit Rs. In Million as per PC-I		Total Quantity as Per PC-I	Progress achieved as On Visit Date (%)	Total Cost completed in Millions	Balance Work To Be Done In %	Remarks
	A	Non-Residential Building					
24.	1.	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED SILICON TRM 200 SERIES OR EQUIVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE,CONTROLLER PLINTH.	5 Nos.	100%	1 (Million)	0%	
	2.	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	17 Nos.	100%	1.105 (Million)	0%	
	3.	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC	270 meter	100%	0.1755 (Million)	0%	

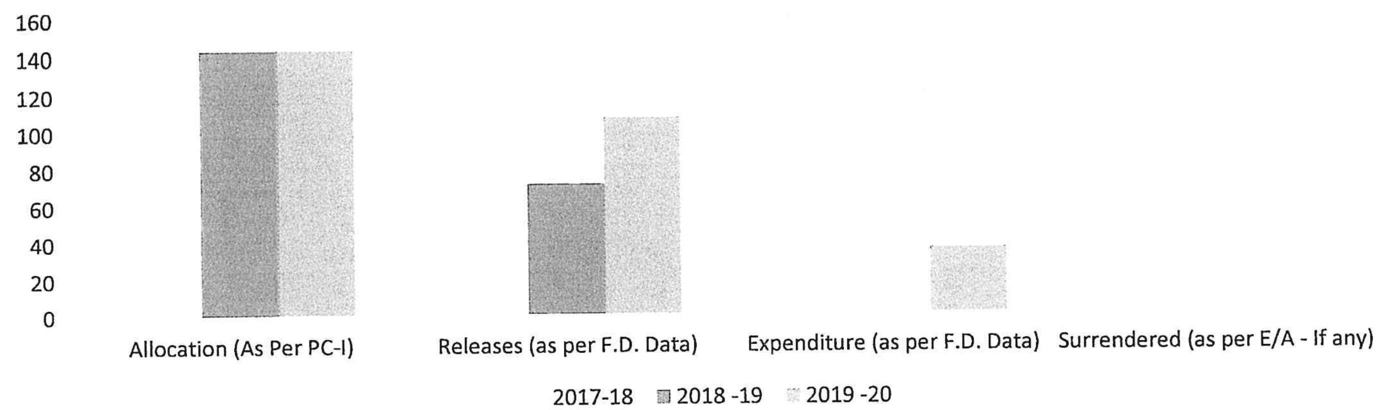
		SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.					
	4.	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	5 Nos.	100%	0.04825 (Million)	0%	
	5.	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER	24 meter	100%	0.017928 (Million)	0%	
	6.	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	11 Nos.	100%	0.0814 (Million)	0%	
	7.	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	730 meters	100%	0.4015 (Million)	0%	
	8.	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	25 Nos.	100%	0.875 (Million)	0%	
	9.	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	05 Nos.		0.11 (Million)	0%	
	10.	PROVIDING & FIXING OF STANDARD POLE 16 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	11 Nos.	100%	0.264 (Million)	0%	
	11.	3 way 200 mm LED Module	08 Nos.	100%	0.432 (Million)	0%	
	12.	Excavation	90 cft	100%	0.029955	0%	

					(Million)		
	13.	Paint Work	180 sft	100%	0.003809 (Million)	0%	
	14.	Curb Block	120 rft	100%	0.03564 (Million)	0%	
	15.	Cement Pavement Block	350 sft	100%	0.06992 (Million)	0%	

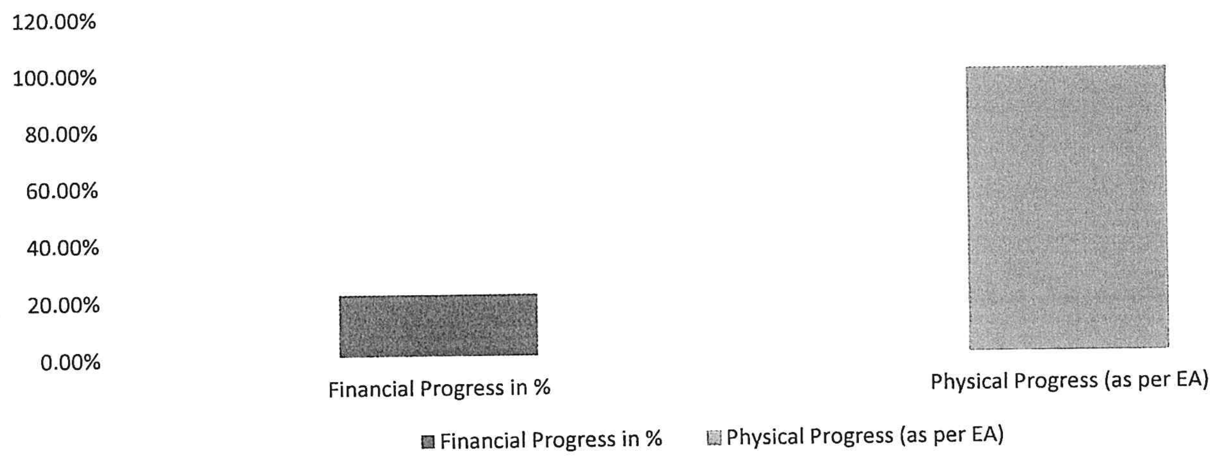
25.	Bottlenecks/Issues faced as per E/A	Recruitment of Staff (Y/N) = N Law & Order (Y/N) = N Land-Acquisition(Y/N) = N Delay in Procurement (Y/N) = N	Delay in release of funds (Y/N) =Y Turnover/Transfer of PD/Staff (Y/N) = N Delay in consultant's appointment (Y/N) = N Other (s) ______
25.	Whether 1% for third party monitoring is paid (then give payment detail)	—	
26.	Material storage Maintained	NO	
26.	House Keeping / Wastage management Maintained	NO	

PART- A(II): PROJECT/UNIT GRAPH ANALYSIS

Financial Progress (Max. 5 Years) of Scheme



Overall Progress



PART- B(I): QUANTITATIVE ANALYSIS *(Relevant Tests conducted by the MEO at Site Visit)*

Domain	Activity / Material	Name of the Test	Readings Mentioned as per Design	Readings Actual at Site	GAP (if any)	Unit	Standard	Remarks (+/-)
Buildings / Roads / Bridges / Underpasses / Irrigation Banks	--	--	--	--	--	--	--	
		Schmidt Hammer Test Column/Beam #	23.3	23.3	None	N/mm2	30 to 50 ASTM C-39	+
		--	--	--	--	--	--	
		Size of Column	18*18inches	18*18inches	None	Ft/meter	IS	+
		--	--	--	--	--	--	
		Size of Beam	18*9inches	18*9inches	None	Ft/meter	IS	+
		--	--	--	--	--	--	
		Thickness of Slab	6inches	6inches	None	mm/Inch	IS	+
		--	--	--	--	--	--	
		Class of Bricks	A	A		A / B / C	IS	+
		--	--	--	--	--	--	
		Desilting	N/A	N/A	N/A	Ft / meter	IS	N/A
		--	--	--	--	--	--	
		Honey Combing		YES / NO	Found in # of Places		IS	+
				No				
		--		--	--		--	
		Misalignment		No			IS	+
				--	--		--	
		Seepage		No			IS	+
		--		--	--		--	
		Uneven Tiling		N/A			IS	
		--		--		--	--	
		--	-	--		--	--	

Result:

No. of (+) Achieved	08--
No. of (-) Achieved	00--

PART- B(II): QUANTITATIVE ANALYSIS *(Based on the data provided by E/A)*

Domain	Activity / Material	Name of the Test	Standard Required	Readings Provided by E/A	GAP Analysis (if any)	Unit	Standard	Remarks
		--	--	--	--	--	--	N/A
		Excavation and Fill						
		--	--	--	--	--	--	
		--	--	--	--	--	--	
		Proctor Compaction Test	95%				AASHTO	
		--	--	--	--	--	--	
		Sp. Gravity	2.6 > 2.7				ASTM C-128	
		--	--	--	--	--	--	
		Slump Test	80 > 150			Mm	ASTM C 143	
		--	--	--	--	--	--	
		Water-Cement Ratio	0.45 (Max)					
		--	--	--	--	--	--	
		Tensile Test	60000			Psi	ASTM A-615	
		--	--	--	--	--	--	
		Schmidt Hammer Test	30 > 50			N/mm2	ASTM C-39	
		--	--	--	--	--	--	
		Cube Compressive Strength	25000			Psi	ACI - 318	
		--	--	--	--	--	--	
		Dia of Pile				Ft/Meter		
		--	--	--	--	--	--	

-

PART- C (I): DOCUMENTS CHECK LIST PROVIDED BY E/A

Item #	Items	Check (Yes/No)	Remarks
1	Filled Project Profile from EA	YES	
2	PC-I	YES	
3	AA	YES	
4	Technical Sanction	YES	
5	Survey Book	N/A	
6	Inspection Book	NO	
7	Measurement Book	N/A	Its umbrella Scheme, expenditure has been made in different districts while Larkana district witnesses 0 expenditure
8	Soil investigation report	N/A	
9	Bid Evaluation Report	YES	
10	Construction Drawings	YES	
11	Whether SEPA EIA/EA is (Applicable or not) If Yes, EIA/IA has been carried out or not	NO	

PART- D: CONCLUSION

1. Project/Unit Status (Satisfactory / Unsatisfactory): **<u>Satisfactory</u>**

2. Observations

SR. #	OBSERVATION OF MEC	REPLY OF EXECUTIVE ENGINEER	COMPLIANCE REPLIES OF MEC
	Payment is not released to the contractor yet, hence; Larkana District witnessed zero expenditure.	Agreed, Larkana District Witnesses Zero Expenditure yet.	**Agreed.**
	• **Traffic Signals @ Taluka Police Station Larkana:**		
1.	Excavation in foundation was carried out **04 feet** deep from the earth level.	Agreed.	**Agreed.**
2.	Width of the RCC isolated foundation was **13*13.**	Agreed.	**Agreed.**
3.	**G.I** Poles are used and installed having 16".	Agreed.	**Agreed.**
4.	**4** Standard Poles with good quality are installed having **16 FT** elevation from the earth level.	Agreed.	**Agreed.**
5.	**SEIMENS TURKISH / SWARCO 3-way** Traffic Light (Red + Amber + Green) 200 MM diameter installed and completed.	Agreed.	**SEIMENS Equivalence certificate has been provided to the MEC Team, which is attached below.**
6.	Each Pole contains **06** Traffic Lights.	Agreed.	**Agreed.**
7.	Silicon CD50 3 Digital Dual Color Count down Timer.	Agreed.	**Agreed.**
8.	Schimit hammer test conducted on foundation was found to be **25 R/V, 20R/V**	Agreed.	**Agreed.**
	• **Traffic Signals @ Qamber Stand Larkana:**		
1.	Excavation in foundation was carried out **04 feet** deep from the earth level.	Agreed.	**Agreed.**
2.	Width of the RCC isolated foundation was **13*13.**	Agreed.	**Agreed.**
3.	**G.I** Pole is used and installed having 16".	Agreed.	**Agreed.**
4.	**1** Standard Pole with good quality was installed having **16 FT** elevation from the earth level.	Agreed.	**Agreed.**
5.	**SEIMENS TURKISH / SWARCO 3-way** Traffic Light (Red+Amber+Green) 200 MM diameter installed and completed.	Agreed.	**SEIMENS Equivalence certificate has been provided to the MEC Team, which is attached below.**
6.	One Pole contains **06** Traffic Lights.	Agreed.	**Agreed.**

7.	Silicon CD50 3 Digital Dual Color Count down Timer.	Agreed.	**Agreed.**
	• **Traffic Signals @ City hospital Larkana:**		
1.	Excavation in foundation was carried out **04 feet** deep from the earth level.	Agreed.	**Agreed.**
2.	Width of the RCC isolated foundation was **13*13.**	Agreed.	**Agreed.**
3.	**G.I** Pole is used and installed having 16".	Agreed.	**Agreed.**
4.	**4** Standard Poles with good quality were installed having **16 FT** elevation from the earth level.	Agreed.	**Agreed.**
5.	**SEIMENS TURKISH / SWARCO 3-way** Traffic Light (Red+Amber+Green) 200 MM diameter installed and completed.	Agreed.	**SEIMENS Equivalence certificate has been provided to the MEC Team which is attached below.**
6.	Each Pole contains **06** Traffic Lights.	Agreed.	**Agreed.**
7.	Silicon CD50 3 Digital Dual Color Count down Timer.	Agreed.	**Agreed.**
	• **Traffic Signals @ Chanka Pull Larkana:**		
1.	Excavation in foundation was carried out **04 feet** deep from the earth level.	Agreed.	**Agreed.**
2.	Width of the RCC isolated foundation was **13*13.**	Agreed.	**Agreed.**
3.	**G.I** Pole is used and installed having 16".	Agreed.	**Agreed.**
4.	**1** Standard Poles with good quality was installed having **16 FT** elevation from the earth level.	Agreed.	**Agreed.**
5.	**SEIMENS TURKISH / SWARCO 3-way** Traffic Light (Red+Amber+Green) 200 MM diameter installed and completed.	Agreed.	**SEIMENS Equivalence certificate has been provided to the MEC Team which is attached below.**
6.	Pole contains **06** Traffic Lights.	Agreed.	**Agreed.**
7.	Silicon CD50 3 Digital Dual Color Count down Timer.	Agreed.	**Agreed.**
	• **Traffic Signals @ Shahnawaz Liberary Chowk Larkana:**		
1.	Excavation in foundation was carried out **04 feet** deep from the earth level.	Agreed.	**Agreed.**
2.	Width of the RCC isolated foundation was **13*13.**	Agreed.	**Agreed.**
3.	**G.I** Pole is used and installed having 16".	Agreed.	**Agreed.**

4.	**1** Standard Poles with good quality was installed having **16 FT** elevation from the earth level.	Agreed.	**Agreed.**
5.	**SEIMENS TURKISH / SWARCO 3-way** Traffic Light (Red+Amber+Green) 200 MM diameter installed and completed.	Agreed.	**SEIMENS Equivalence certificate has been provided to the MEC Team which is attached below.**
6.	Pole contains **12** Traffic Lights.	Agreed.	**Agreed.**
7.	Silicon CD50 3 Digital Dual Color Count down Timer.	Agreed.	**Agreed.**
8.	All Traffic Signals are ready to be operational but E/A could not hand over to the concerned officials for operational purpose, According to E/A no one is ready for handing and taking of Traffic Signals Neither Mayor is interested nor Police.	Agreed.	**Agreed.**
RMEO Observations			
	IT was observed that E/A has to compromised over brand particularly control panels.	Local brand is taken in PC-1 and installed same at site.	**Agreed.**
	E/A didn't produced detail procurement documents and poles were not observed properly galvanized.	Overall related documents are provided to the MEC Team now.	**Agreed, overall documents are received in Office now.**

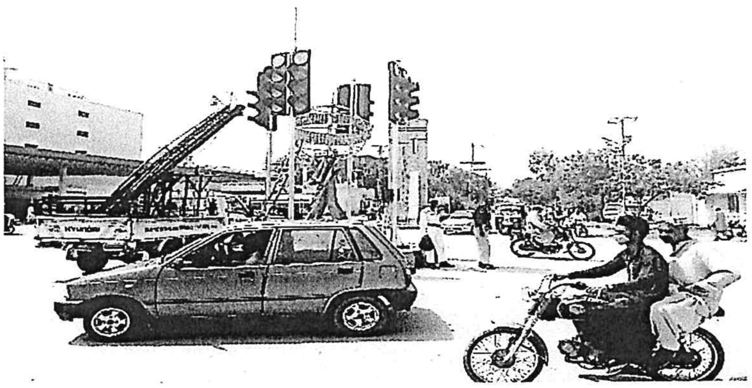
3.	MEO Recommendations	E/A make sure to hand over signals to the concerns for operational purpose as soon as possible.
4.	RMEO Observation	
	Specific RMEO Findings/ Observation	Previously raised observation has been rectified by providing equivalent certificate by concerned E/A However foundations of Two traffic signals were observed seriously damaged which needs an immediate attention /repair by concerned E/A.
	Technical Justification	Accompanied during visit
	Report Status	Satisfactory
5.	SMEO Observation	
	Specific SMEO Findings/ Observation	Not Visited in-person, the justifications based on the facts mentioned in the report.
	Technical Justification	A. As mentioned in Para-reply Counter Observations, following rectifications have taken place: 1. Equivalence Certificate provided to MEC. B. On the basis of Rectifications Agreed-to in Para reply observations and pictures included in this report. EA to implement all the recommendations mentioned above and conduct tests to ascertain quality of work.

		C. EA is advised that damaged foundations of signals should be repaired ASAP before further deterioration takes place and keep all the foundations maintained. D. However, remaining scope of work to be completed according to work schedule, within quality standard followed in PC-I and estimated cost keeping in view the operability & sustainability of scheme infrastructure under all conditions. Before the final payment to contractor, the EA should make a punch list of minor/major shortcomings (if any) and get those repaired/rectified as per scope. E/A to prepare and submit PC-III (A) during execution and PC-IV immediately after completion of scheme. E. It is the ultimate responsibility of EA to complete the scheme within stipulated time, Scope and Quality set in PC-I, approved cost and ensure financial transparency. Also AD to ensure geo-tagging (of running stock as well as dead stock) & maintenance of the facility so that best results are obtained during whole lifecycle of project and as planned the facility plays its role in achieving relevant SDG. "Corona is epidemic. The precaution that heals" All COVID - 19 Precautions to be taken at all workplaces.
	Report Status	Satisfactory

		Name	Designation	Contact # (Mobile)	Email Address
6.	Officers met During Visit	Khan Muhammad Shah	XEN – SMTD	-	-

		Name	Designation
7.	MEC Visiting Team	Mohsan Ali Memon	Monitoring & Evaluation Officers LRK
		Sarfraz Ali Memon	RMEO LRK
8.	Prepared By:	Mr. Mohsan Ali Memon, MEO Social Sector	
9.	Checked By:	Mr. Sarfraz Ali Memon, RMEO Larkana	
10.	Verified By:	Mr. Fateh Junejo, SMEO (Infra)	
11.	Approved for Publishing By:	Mr. Muhammad Ali Khoso, Director General (MEC)	

PART- E: PICTORIAL VIEW OF PROJECT



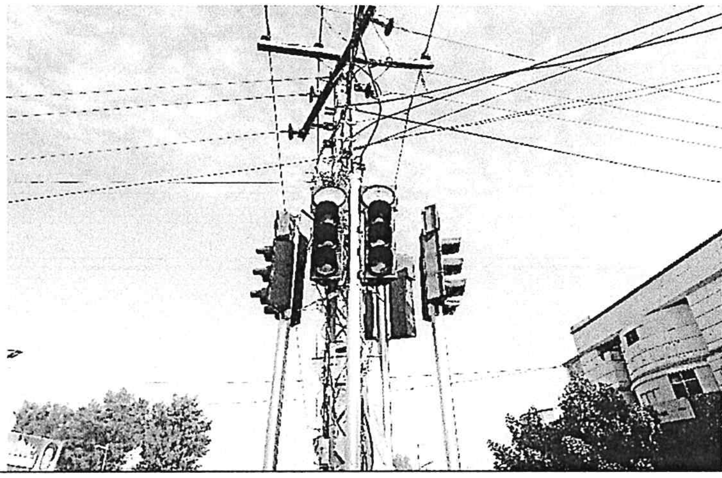
VIEW OF THE TRAFFIC SIGNALS



MEC TEAM DISCUSSING WITH E/A



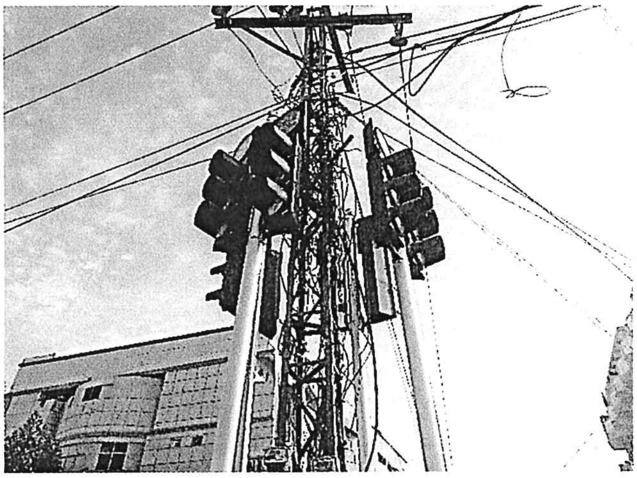
DAMAGED FOUNDATION AT STIE



SINGNALS



MEC TEAM DISCUSSING WITH E/A

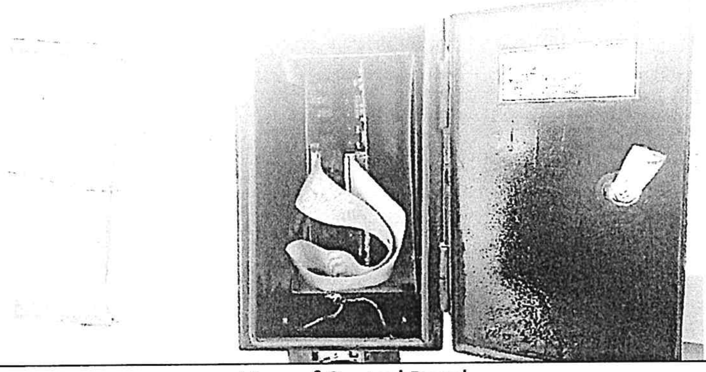


AONTHER VIEW OF DIFFERENT SIGNALS

PART- E: PICTORIAL VIEW OF PROJECT



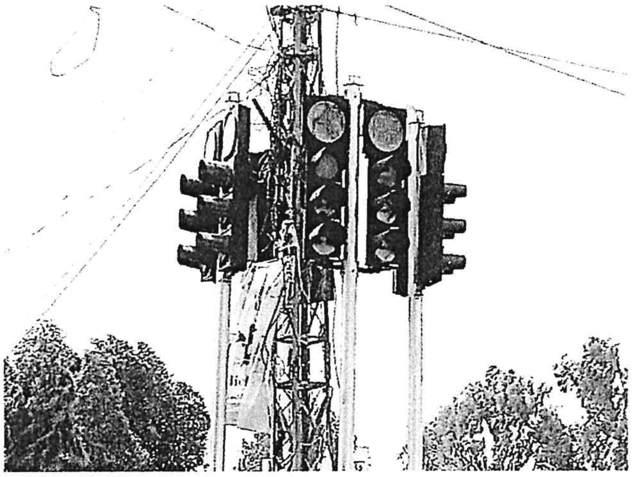
VIEW OF THE TRAFFIC SIGNALS



View of Control Panel



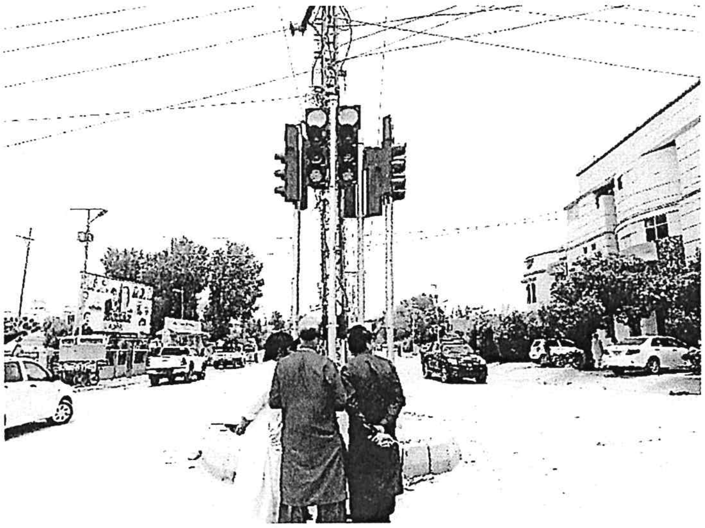
Inside view of the control panel



SINGNALS

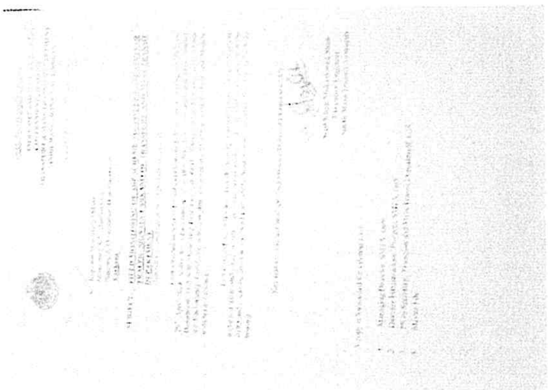


Discussing with E/A

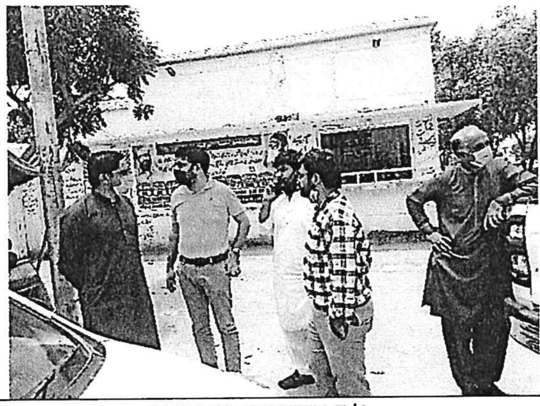


AONTHER VIEW OF DIFFERENT SIGNALS

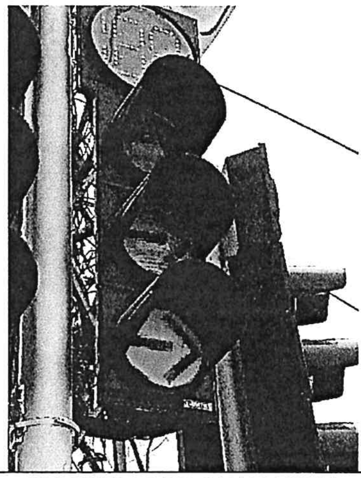
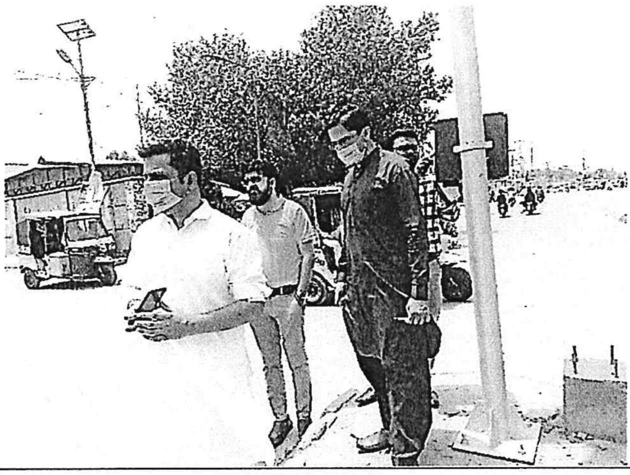
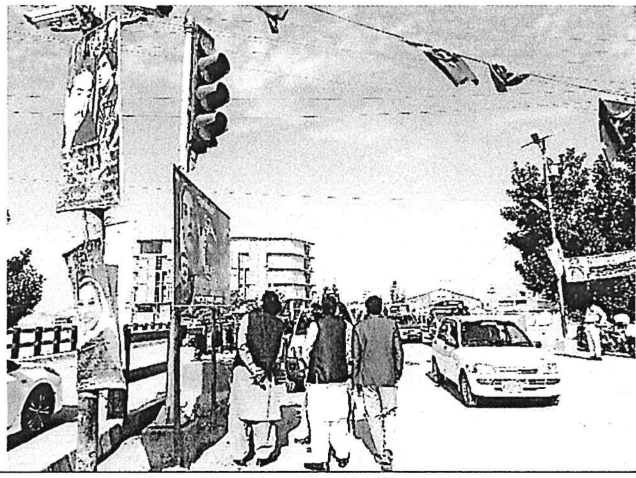
PART- E: PICTORIAL VIEW OF PROJECT



EQUAVALANCE CERTIFICATE



DISCUSING WITH E/A

<table>
<tr><td></td><td></td></tr>
<tr><td>WHILE MONITORING AT STIE</td><td>SIEMONS LOGO CAN BE SEEN</td></tr>
<tr><td></td><td></td></tr>
<tr><td>CONTROL PANEL</td><td>DIFFERENT VIEW OF MONITOING AT SITE</td></tr>
</table>

SAY NO TO CORRUPTION

INFRA/SMTA/SH/ 2021 NO. [illegible]
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Karachi, dated the [illegible]

To,

Regional Monitoring Officer,
Monitoring & Evaluation Cell,
Planning & Development Department GoS,
Larkana.

SUBJECT: **FIELD MONITORING OF ADP SCHEME NO: 1902 UP GRADATION OF TRAFFIC SIGNALS LARKANO OF TRANSPORT AND MASS TRANSIT DEPARTMENT.**
(Equivalency certificate for the traffic light source module)

I am directed to refer to the subject mentioned above and a meeting was held on 29th April 2021, under the Chairmanship of worthy Secretary, Transport and Mass Transit Department, GoS with Monitoring Evaluation Cell P&D. Wherein it has been decided to submit the Equivalency Certificate with complete specifications of traffic light housing and Module installed at Larkana..

In this regard we certify that the light housing installed at Larkana is of Siemens make and the module used in traffic light heads are equivalent to the specifications mention in the BOQ and it can be fixed in any third-party traffic head housing including Siemens traffic head housing.

Key features and technical specification are attached at (Annexure 'A')

Syed Khan Muhammad Shah
Executive Engineer
Sindh Mass Transit Authority

A copy is forwarded for information to:-

1. Managing Director, SMTA, GoS.
2. Director Infrastructure/ Projects, SMTA, GoS.
3. PS to Secretary, Transport and Mass Transit Department, GoS.
4. Master File.

SUKKUR

LIST OF NEW TRAFFIC SIGNALS INSTALLED IN SUKKUR

S.No	NAME OF INTERSECTION
1	BY PASS CHOWK/ MILITARY ROAD
2	COURT ROAD CHOWK/ MILITARY ROAD
3	LAB-E-MEHRAN CHOWK

SUMMARY OF SUKKUR INTERSECTIONS

S.NO	NAME OF INTERSECTION	ORIGINAL PC-1 SIGNAL WORK AMOUNT	Page -NO	ORIGINAL PC-1 CIVIL WORK AMOUNT	Page - No	ORIGINAL PC-1 CIVIL WORK AMOUNT	REVISE PC-1 CIVIL AMOUNT
	POLICE HEAD QUARTER CHOWK	2225750				1355894	
	CLOCK TOWER CHOWK	2225750				1355894	
	MUHAMMADI CHOWK	2225750				1355984	
	DOLPHIN CHOWK	2225750				1355894	
	GHARAM GODI CHOWK	1654750				1355894	
	SHIKARPUR CHOWK	1654750				1355894	
1	BY PASS CHOWK		224-226	2566048	230		1594271
2	COURT ROAD CHOWK		227-229	1944275			NIL
3	LAB-E-MEHRAN CHOWK			NIL	231		2249615
	TOTAL	**12212500**		**4510323**		**8135454**	**3843886**

TOTAL REVISE AMOUNT OF SIGNALIZATION WORK **4510323**

TOTAL REVISE AMOUNT OF CIVIL WORK **3843886**

TOTAL COST **8354209**

223

223/A

Government of Sindh (GoS)
Transport & Mass Transit Department (TMTD)
Sindh Mass Transit Cell (SMTC)

Minutes of Meeting

Project : Up Gradation of Signals

Subject : Technical Discussion and change location of Garam Godi Signal on Sukkur city

Meeting Date : 27th June 2018

Minuted By : Syed Khan Muhammad Shah(Executive Engineer , SMTA, TMTD)

Time : 5:00 pm to 6:30pm

Status : Issued

Venue : Deputy Commissioner Office Sukkur

Attendees:

S.N	Name	Designation	Company
1	Arsalan Shaikh	Mayor	Sukkur
2	Raheem Bux Matlo	Deputy Commissioner	Sukkur
3	Syed Khan Muhammad Shah	Executive Engineer	SMTC
4	Fasil Sattar	Lead Contactor	Silicon Communication
5	Syed Muhammad Azim	Assistant Traffic Engineer (KDA)	KDA
6	Haider Ali	Civil Engineer/civil Consulant Ex-Director KDA	KDA
7	Sabir Ali	Civil Engineer	Ghousia Builder

Distribution: All Attendees

02/07/18

223/B.

Government of Sindh (GoS)

Transport & Mass Transit Department (TMTD)

Sindh Mass Transit Cell (SMTC)

Purpose of Meeting (Agenda)

Sindh Mass Transit Authority [SMT] convened a meeting to discuss technical issues on the Up gradation of Signals project at Sukkur city with their contractor and Traffic Signal Engineer from TEB KDA in the connection of this project improve the progress and re location of Garam Godi signal and some site issue.

No.	Description	Action	Remarks
1	Executive Engineer SMTA initiated the meeting by welcoming the participants and giving a brief overview on the agenda of the meeting.	General	No action required
2	Executive Engineer SMTA presented the project and improve work through drawings and informed that: 1) At LAB-E-MEHRAN Geometrical design change and improve for the traffic fellow in the sukkur city 2) Change the Garam Godi Signal to another site and relocate the new site. 3) Improve the progress of project	Silicon Communication Agreed to Improve the progress of work	
3	Mr Arsalan Shaikh Mayor Sukkur indicated the Garam Godi Chock signal not feasible and need to be reviewed and suggest to consider City point Junction for signalization and Geometrical design after detailed study and install digital sing board for awareness for public.	Contractor Agreed to Reviewed After Detailed Study	

A meeting to be convened on Next meeting arranged by Mayor Sukkur and way forward on the interest of project

ISSUED BY:

XEN. SMTC	SYED IRFAN MUHAMMAD SHAH	[signature]	28/02/07/18
SMTC, TMTD	NAME	SIGNATURE	DATE

Paper Copy Distribution: Please acknowledge receipt of Final Version by returning a signed and dated copy of the front sheet to originator.

277

ESTIMATE BY PASS SUKKUR

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
9	PROVIDING & FIXING OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	16000	NOS	96000
10	PROVIDING & FIXING CANTILEVER POLE ASSEMBLY WITH ALL NECESSARY FIYYING,POLE CAP ETC,COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING	3	45000	NOS	135000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	760	650	METER	494000
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	34	747	METER	25398
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	7	7400	NOS	51800
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	15000	NOS	45000

ESTIMATE BY PASS SUKKUR

17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	150	3450	METER	517500
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	7	8600	NOS	60200
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	90	550	METER	49500
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	35000	NOS	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	10	54000	NOS	540000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	18000	NOS	18000

ESTIMATE BY PASS SUKKUR

E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	3	65000	NOS	195000
E-9	Providing & Fixing of Standard Pole 16 ft	1	24000	No	24000
	TOTAL				**2566048**

ESTIMATE COURT ROAD SUKKUR

S.NO	ITEM	QTY	RATE	UNIT	AMOUNT
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED TRM-200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE ,CONTROLLER PLINTH.	1	200000	NOS	200000
9	PROVIDING & FIXING OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	2	16000	NOS	32000
10	PROVIDING & FIXING CANTILEVER POLE ASSEMBLY WITH ALL NECESSARY FIYYING,POLE CAP ETC,COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING	2	45000	NOS	90000
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	445	650	METER	289250
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED 3) INDICATION LAMP.	1	9650	NOS	9650
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	25	747	METER	18675
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	2	7400	NOS	14800
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	2	15000	NOS	30000

ESTIMATE COURT ROAD SUKKUR

17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I.PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	180	3450	METER	621000
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	4	8600	NOS	34400
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	50	550	METER	27500
20	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	3	35000	NOS	105000
E-1	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	6	54000	NOS	324000
E-3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	1	18000	NOS	18000

ESTIMATE COURT ROAD SUKKUR

E-8	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVILENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED+AMBER+GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED MODULE IN ACCORDANCE WITH SPECIFICATION GIVEN.	2	65000	NOS	130000
	TOTAL				**1944275**

229/A

SUKKUR

CIVIL WORKS

COST ESTIMATES

BY PASS

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	8267.36	22.23	**183,783.41**
2	P/F **PRECAST KERB**	Rft	1194	297.01	**354,629.94**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft		199.77	-
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	9137.36	1200.2	**109,666.59**
5	Stone Soling	CFT	1221.585	42	**51,306.57**
6	PCC 1:3:6	CFT	2616.87	125.95	**329,594.78**
7	RCC 1:1.5:3	CFT		349	-
8	Steel Reinfrorcement	KG		100	-
9	Dismantling of cement concrete road	CFt	9137.36	33.275	**304,045.65**
10	Preparing **sub grade**	SFt	1628.78	5.2628	**8,571.94**
11	P/L **sub base** Etc	CFt	6749.852	33.4171	**225,560.48**
12	P/L **Aggregate base course** Etc	CFt		55.4224	-
13	Excavation in slushy, daldaly and disposal	CFT		13.55	-
14	**Painting** with enamel paint of approved quality	SFt	1281	21.1641	**27,111.21**
15	P/I **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft		14.29	-
18	Applying **TACK Coat**	Sft		9.54	-
19	**2" (50 mm) Thick Asphalt**	Sft		82.747	-
				TOTAL AMOUNT	**1,594,270.583**

LAB E MEHRAN

S. NO	DESCRIPTION	Unit	QUANTITY	Rate	Amount
1	**Excavation** for foundation of building, bridges and other structures	CFt	5165	22.23	**114,817.95**
2	P/F **PRECAST KERB**	Rft	1432	297.01	**425,318.32**
3	P/F **Cement paving Blocks** Flooring having Size of 197 x197 x 60 (mm)	Sft	4392	199.77	**877,389.84**
4	Cartage of All Material Lead Upto 10 Miles.	%CFt	7747.5	1200.2	**92,985.50**
5	Stone Soling	CFT	2589	42	**108,738.00**
6	PCC 1:3:6	CFT	2582.5	125.95	**325,265.88**
7	RCC 1:1.5:3	CFT		349	-
8	Steel Reinfrorcement	KG		100	-
9	Dismantling of cement concrete road	CFt	6021.5	33.275	**200,365.41**
10	Preparing **sub grade**	SFt	3452	5.2628	**18,167.19**
11	P/L **sub base** Etc	CFt	1726	33.4171	**57,677.91**
12	P/L **Aggregate base course** Etc	CFt		55.4224	-
13	Excavation in slushy, daldaly and disposal	CFT		13.55	-
14	**Painting** with enamel paint of approved quality	SFt	1365	21.1641	**28,889.00**
15	P/I **Pavement marking 2mm Thick**	SFt		117	-
16	Supplying and fixing of **reflectorize road** studs	Each		596.23	-
17	Providing and spraying **Prime Coat**	Sft		14.29	-
18	Applying **TACK Coat**	Sft		9.54	-
19	**2" (5O mm) Thick Asphalt**	Sft		82.747	-
				TOTAL AMOUNT	**2,249,614.989**

Handing/Taking Over Certificates of New Traffic Signals at Sukkur

SUKKUR MUNICIPAL CORPORATION

No: SMC/XEN(M&E)/- 61

Sukkur dated: 15 / 04 /2021

To,

The Executive Engineer,
Sindh Mass Transit Authority,
Government of Sindh.

Subject: **HANDING OVER OF THE INSTALLATION OF NEW TRAFFIC SIGNALS IN SUKKUR DURING CURRENT FINANCIAL YEAR 2020-21 UNDER ADP SCHEME NO. 1902.**

With reference to your letter No. SMTA/INFRA/SIG/2021/913 dated: 12-04-2021 the undersigned is directed to informed that the Worthy Administrator, Sukkur Municipal Corporation are pleased to grant approval for taking over the Two (02 Nos) Traffic signals mentioned in your above referred letter. Therefore, from dated 15-04-2021 the Traffic Signal take over the said Traffic Signals for further maintenance.

Assistant Executive Engineer (M&E)
Sukkur Municipal Corporation

Copy submitted to:

- **The Administrator**, Sukkur Municipal Corporation,
- **The Managing Director**, SMTA.
- **The Director Infrastructure / Project, SMTA**
- **PS to Secretary, Transport & Mass Transit.**
- **PA to Minister, Transport & Mass Transit.**

Assistant Executive Engineer (M&E)
Sukkur Municipal Corporation

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Dated the 15/04, 2021

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

CUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	3WAY TRAFFIC SIGNAL BYPASS ROAD SUKKUR CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NO
CANTILEVER POLE	03 NOS
STANDARD POLE 12 FEET HEIGHT	06 NOS
STANDARD POLE 16 FEET HEIGHT	01 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	03 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	10 NOS
1-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	01 NOS
DUAL COLOUR COUNT DOWN TIMER	03 NOS
SINGLE PHASE ELECTRIC METER	01 NO

This is to certified that SMTA (Sindh Mast Transit Authority) Government of Sindh hand over the above mention traffic signal with equipment detail in working and satisfactory condition to Sukkur Municipal Corporation.

Terms and Conditions

1. Following are the parameters which pretend to fulfill on traffic signal intersection by Sindh Mass Transit Authority.
   a. Lane Marking
   b. Traffic Signal Indications board
   c. Cat eyes
2. Alternate energy source should be provided for proper functioning of traffic signals at Sukkur.

HANDIND OVER BY	TAKING OVER BY
(SHAKEEB MEMON) Sub-Engineer Sindh Mass Transit Authority	15/4/2021 (IRFAN AHMED BHAYO) Assistant Executive Engineer (E&M) Sukkur Municipal Corporation
(SYED KHAN MUHAMMAD SHAH) Executive Engineer Sindh Mass Transit Authority Government of Sindh	15/4/2021 (AIJAZ SUNDRANI) Executive Engineer (E&M) Sukkur Municipal Corporation

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Dated the 05/04, 2021

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

CUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	3WAY TRAFFIC SIGNAL COURT ROAD SUKKUR CITY

DETAIL OF EQUIPMENT

CONTROLLER	01 NO
CANTILEVER POLE	02 NOS
STANDARD POLE 12 FEET HEIGHT	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 300 MM (WITH LED MODULE)	02 NOS
3-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	06 NOS
1-WAY TRAFFIC LIGHT ASPECT 200 MM (WITH LED MODULE)	01 NOS
DUAL COLOUR COUNT DOWN TIMER	03 NOS
SINGLE PHASE ELECTRIC METER	01 NO

This is to certified that SMTA (Sindh Mast Transit Authority) Government of Sindh hand over the above mention traffic signal with equipment detail in working and satisfactory condition to Sukkur Municipal Corporation.

Terms and Conditions

1. Following are the parameters which pretend to fulfill on traffic signal intersection by Sindh Mass Transit Authority.
   a. Lane Marking
   b. Traffic Signal Indications board
   c. Cat eyes
2. Alternate energy source should be provided for proper functioning of traffic signals at Sukkur.

HANDIND OVER BY

(SHAKEEB MEMON)
Sub-Engineer
Sindh Mass Transit Authority

(SYED KHAN MUHAMMAD SHAH)
Executive Engineer
Sindh Mass Transit Authority
Government of Sindh

TAKING OVER BY

15/4/2021
(IRFAN AHMED BHAYO)
Assistant Executive Engineer (E&M)
Sukkur Municipal Corporation

15/4/2021
(AIJAZ SUNDRANI)
Executive Engineer (E&M)
Sukkur Municipal Corporation

No. SMTA/INFRA/Sig/2019/
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT
SINDH MASS TRANSIT AUTHORITY

Dated the 15/4, 2021

TRAFFIC SIGNAL EQUIPMENT ACCEPTANCE CERTIFICATE

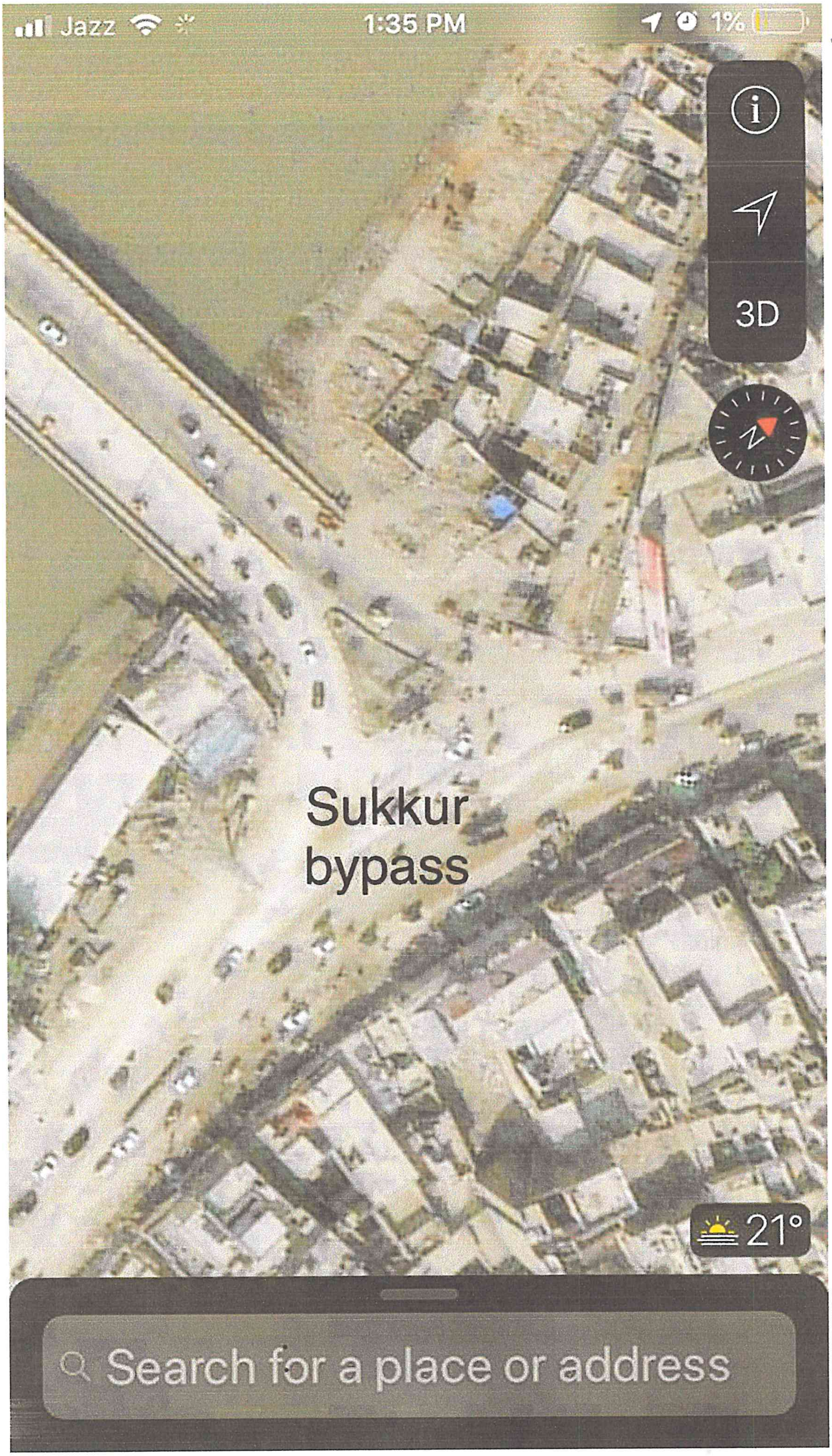
CUSTOMER	SINDH MASS TRANSIT AUTHORITY
INTERSECTION	3WAY TRAFFIC SIGNAL INTERSECTION COURT ROAD AND BYPASS SUKKUR CITY

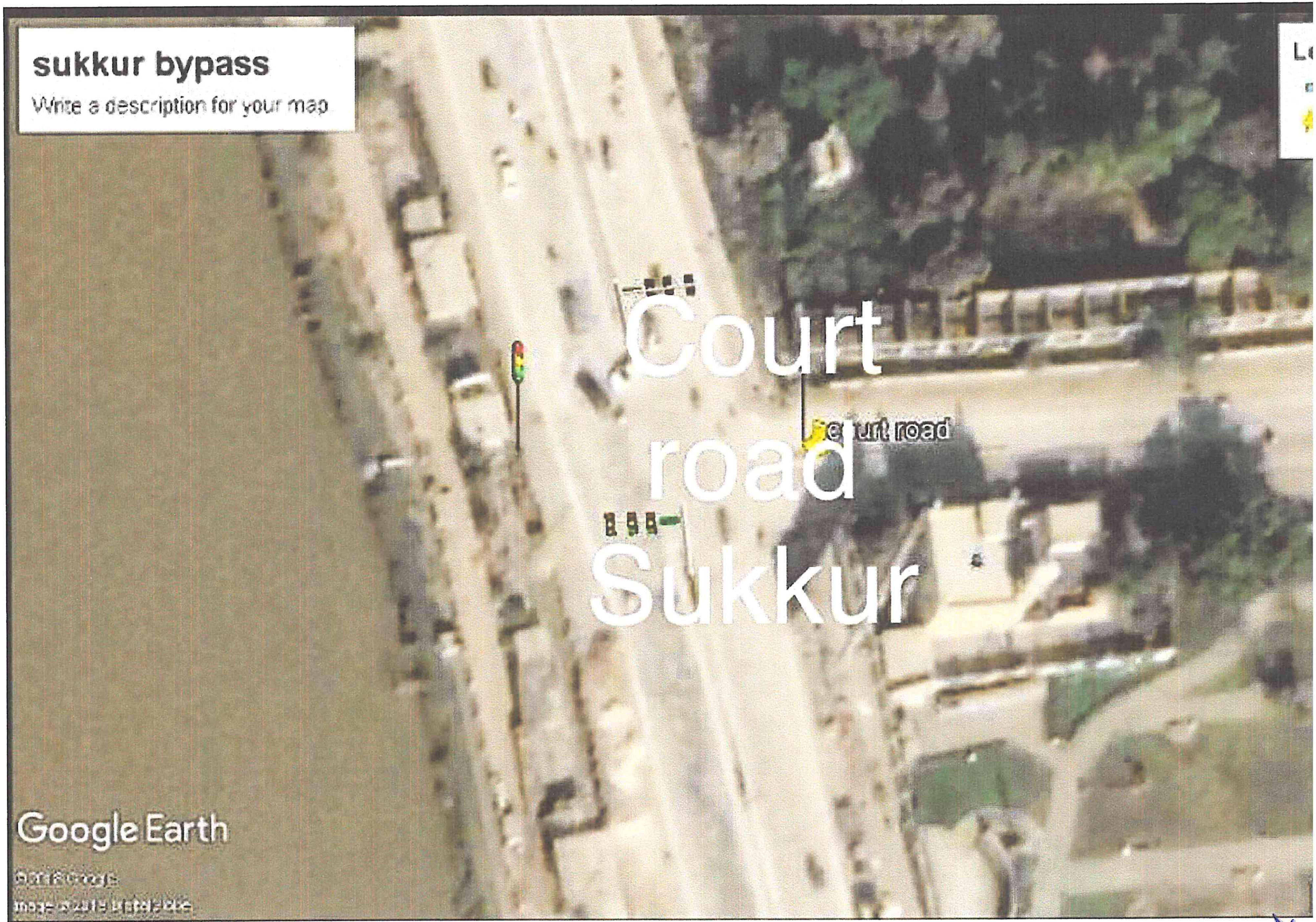
IT IS CERTIFIED THAT THE REQUIRED TRAINING BAND NECESSARY SOFTWARE FOR PROGRAMMING SIGNALS TIMING IS GIVING BY THE CONTRACTOR SILICON COMMUNICATION JV GOSH BUILDER IN PRESENCE OF SMTA REPRESENTATIVE TO CONCERN DEPARTMENT IN SUKKUR CITY.

SINDH MASS TRANSIT AUTHORITY
GOVERNMENT OF SINDH

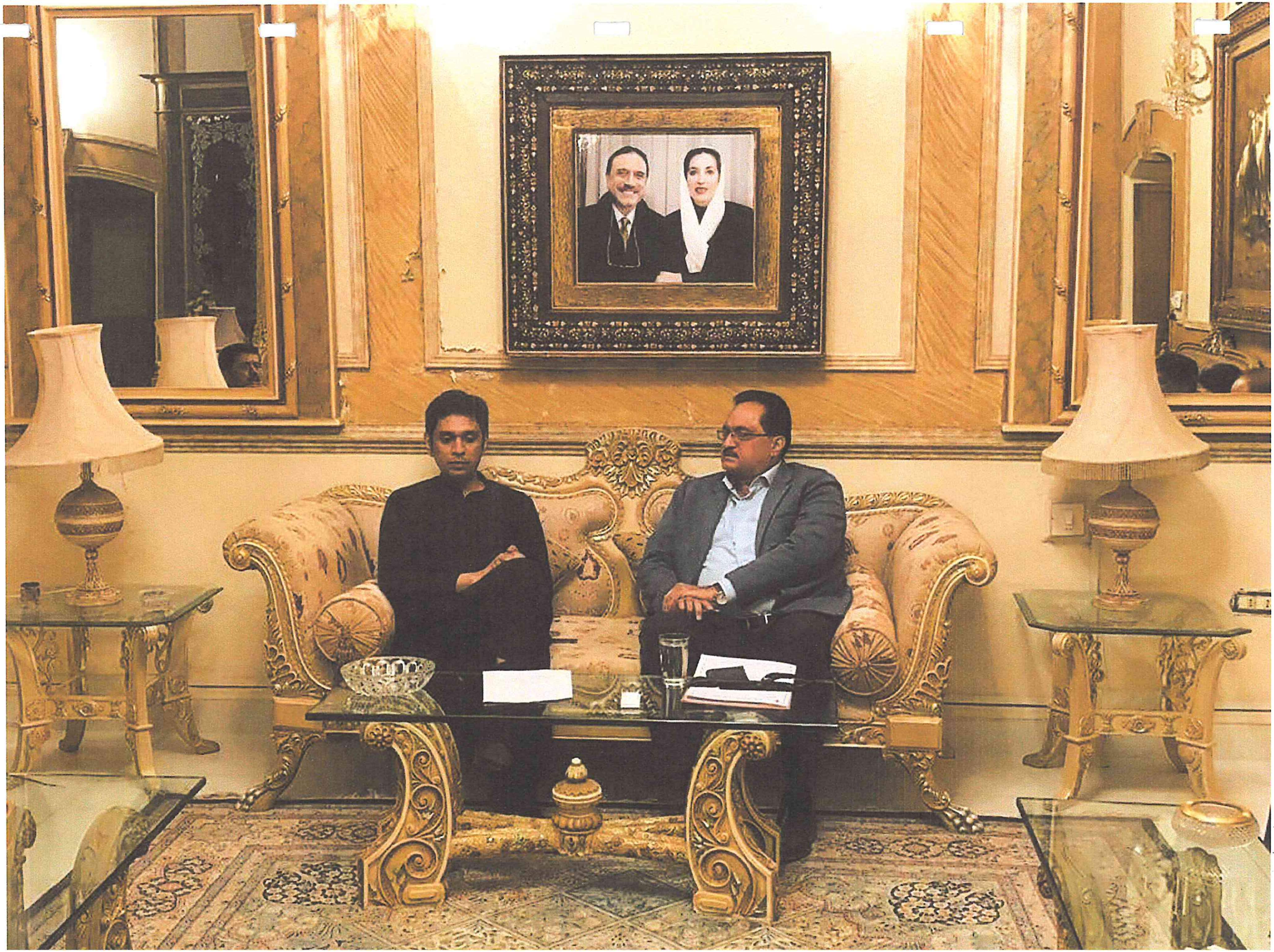
15/04/2021
IRFAN AHMED BHAYO
SUKKUR MUNCIPAL CORPORATION

15/4/21
ENGR. BABAR ALI MIRZA
CONTRACTOR REPRESENTATIVE

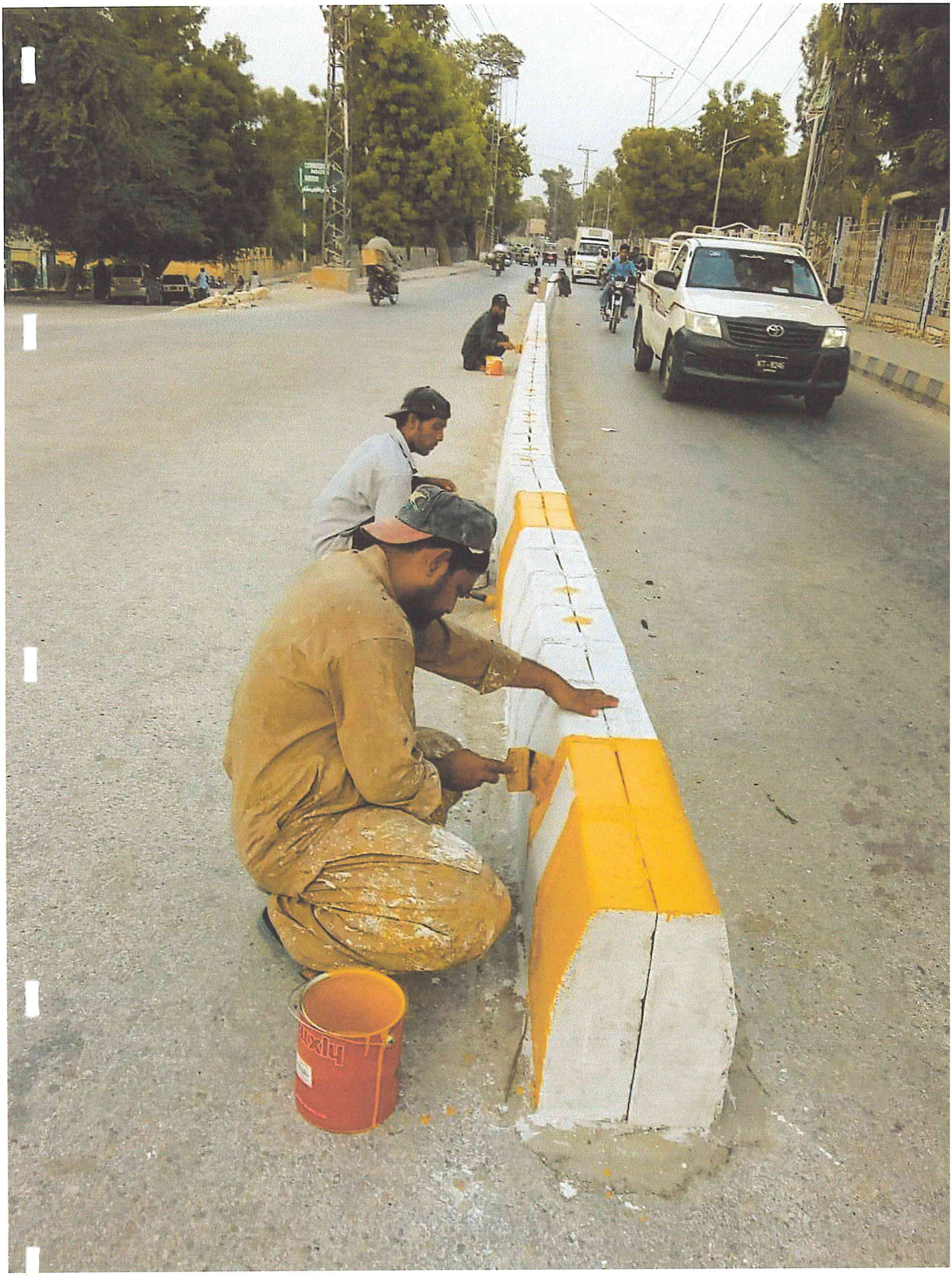

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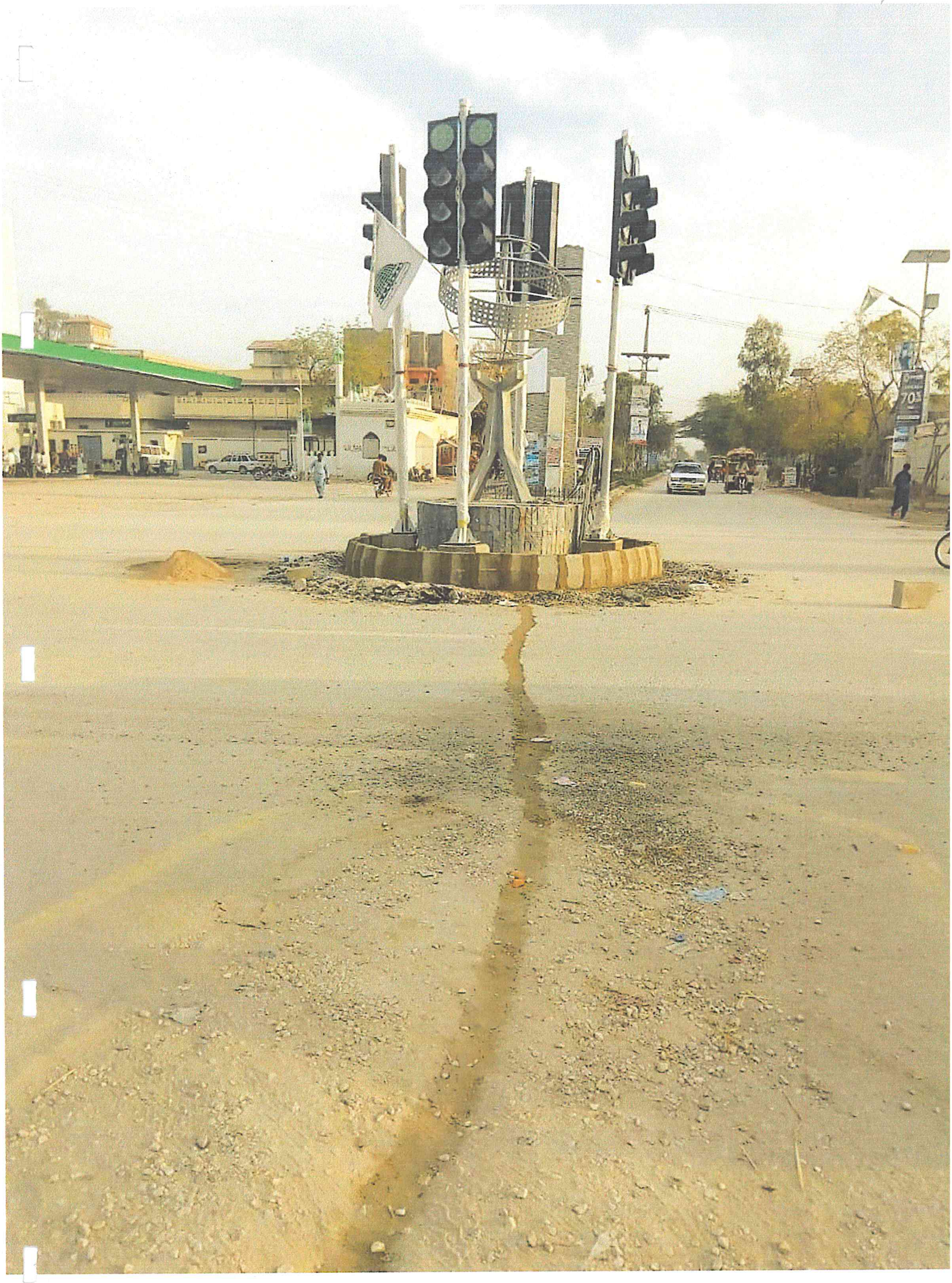


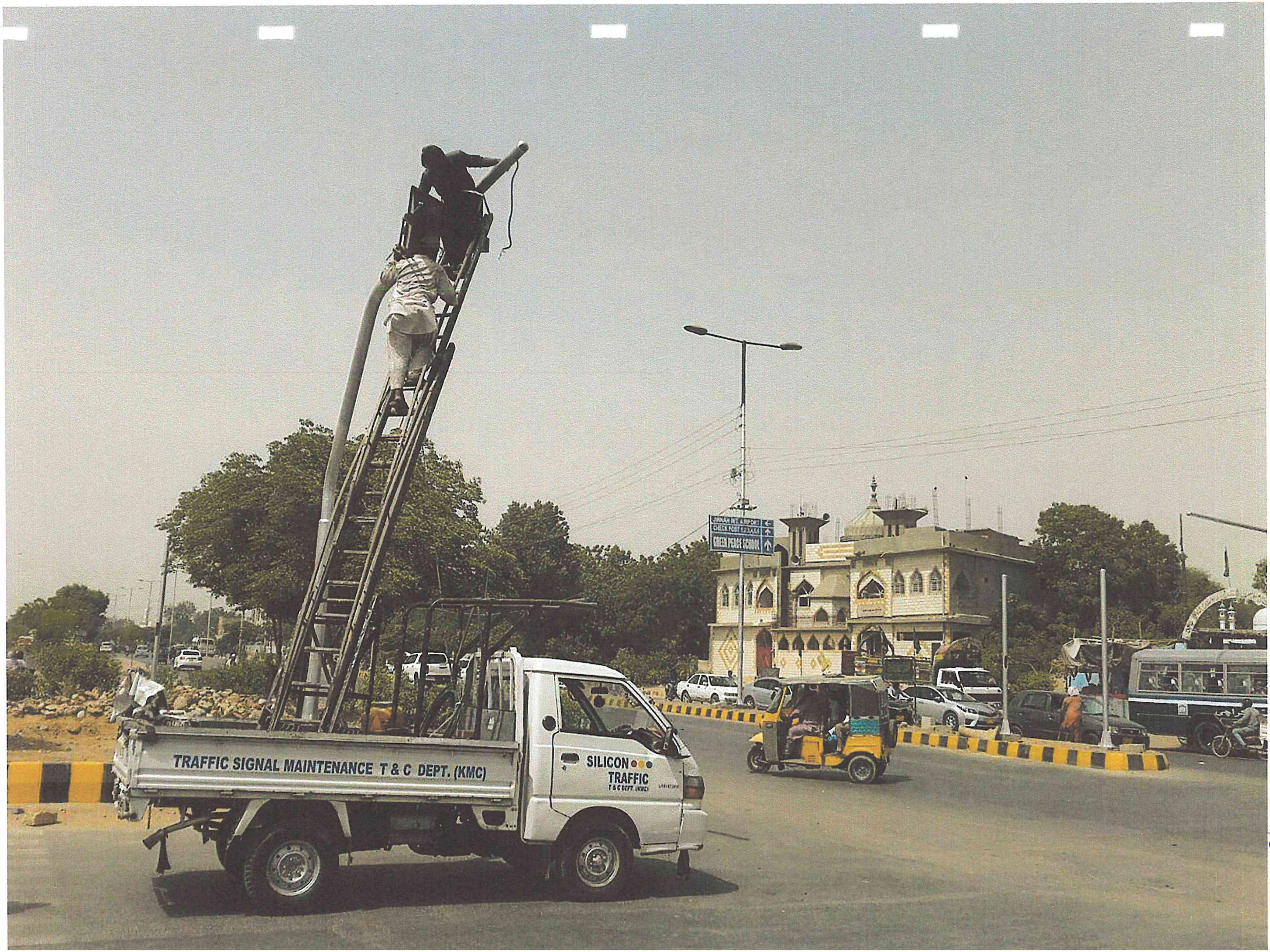





Welcome to
foodclub
foodclub

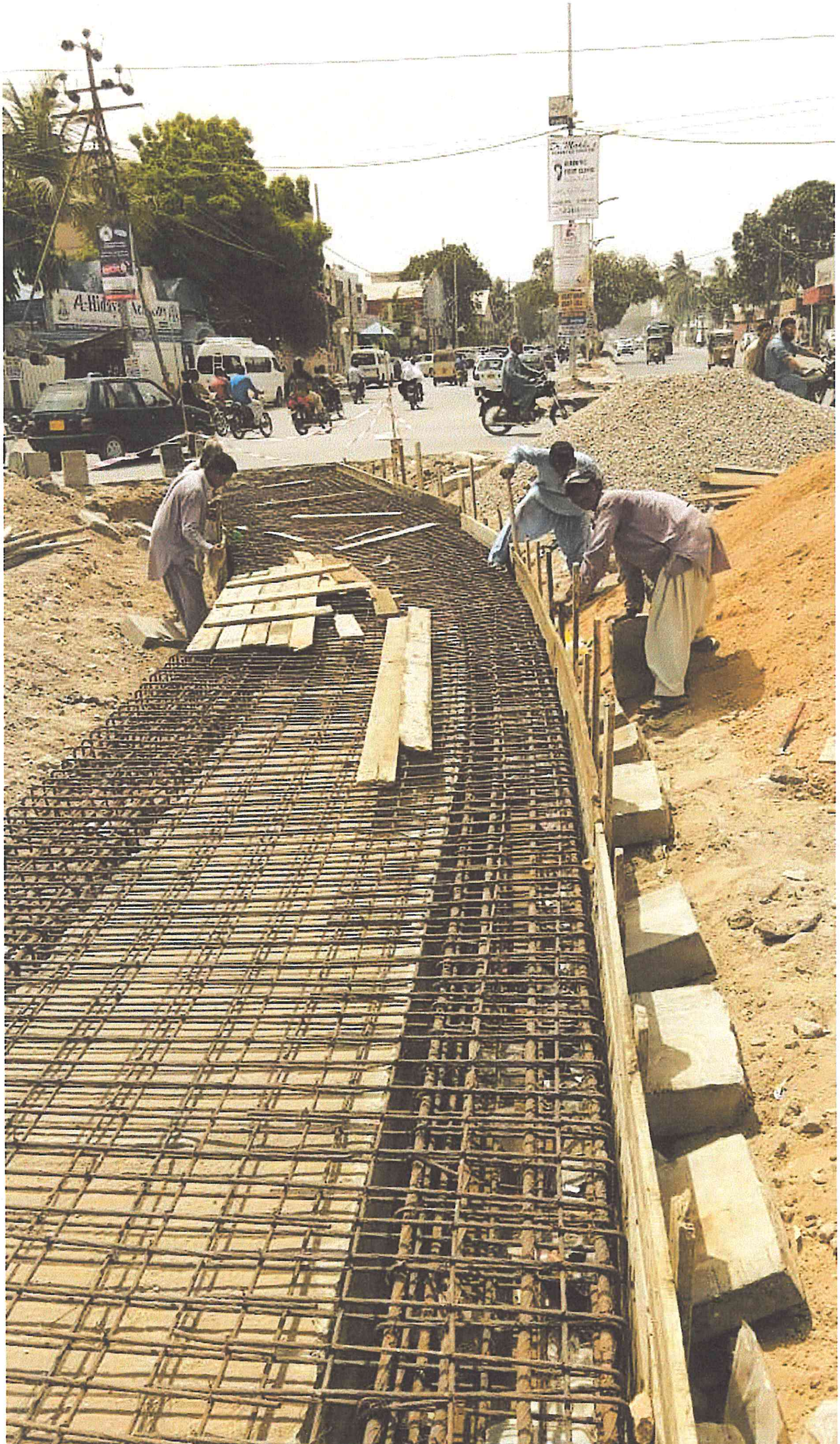


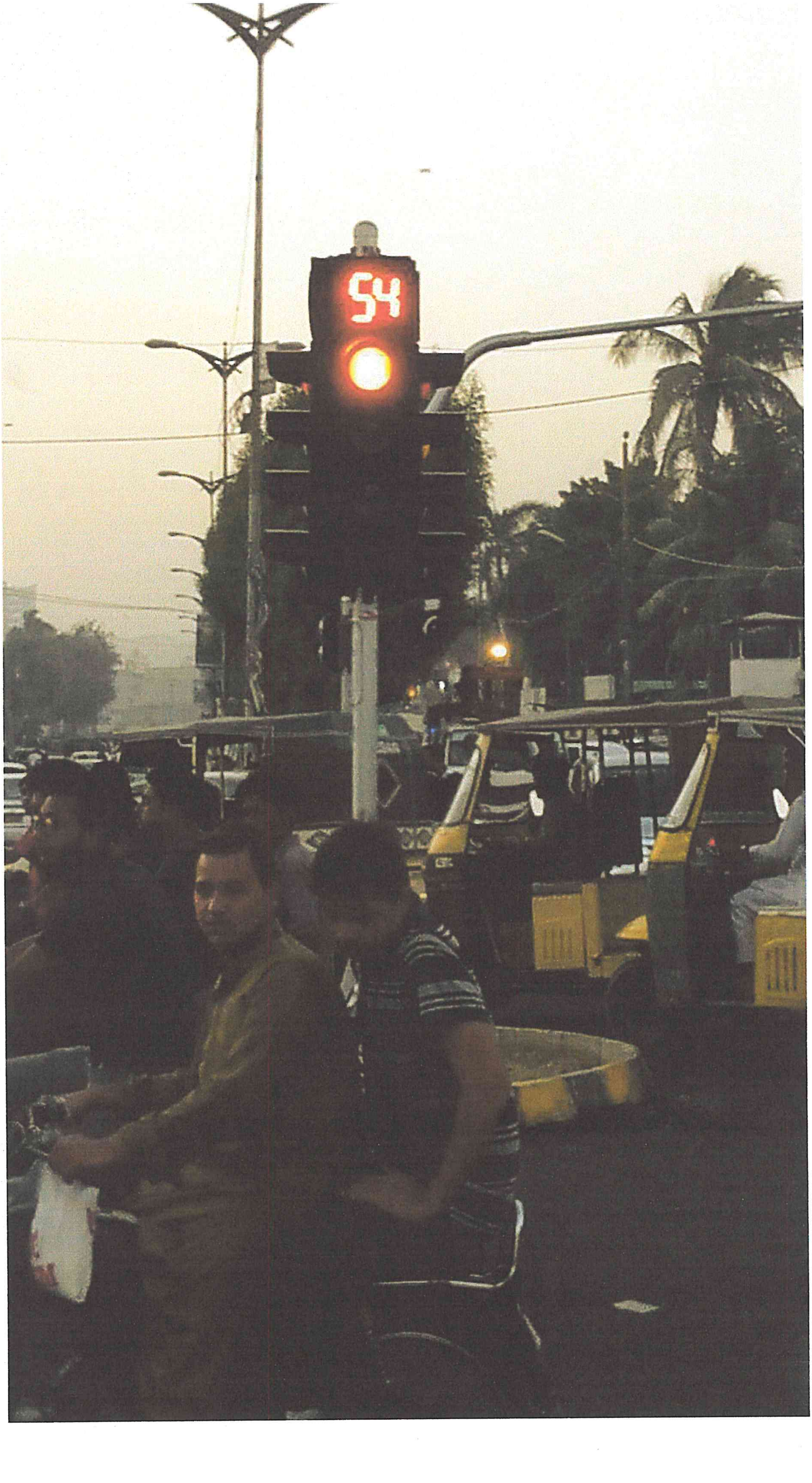



TRAFFIC SIGNAL MAINTENANCE T & C DEPT. (KMC)
SILICON
TRAFFIC
T & C DEPT. (KMC)
GREEN PEACE SCHOOL

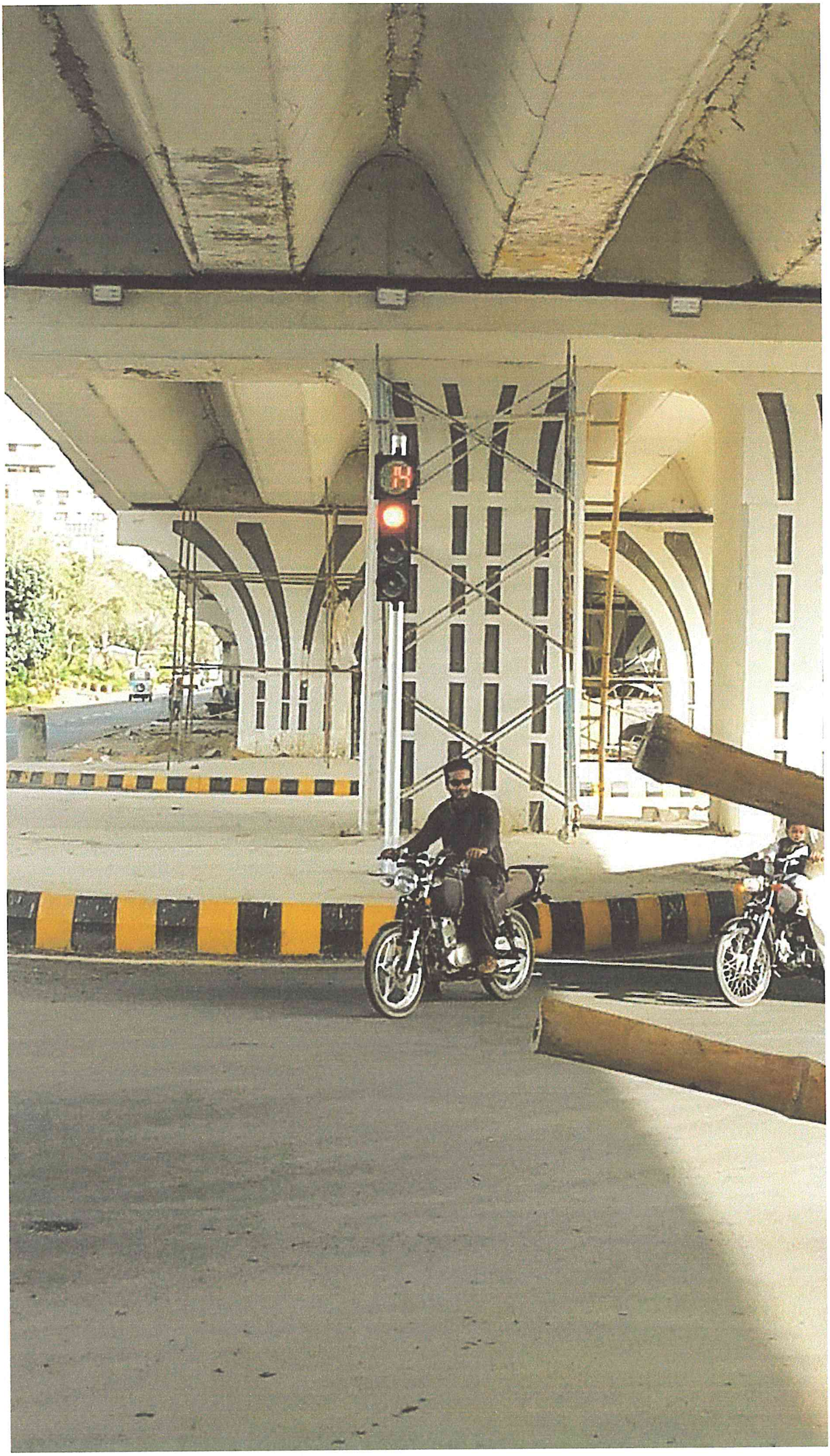


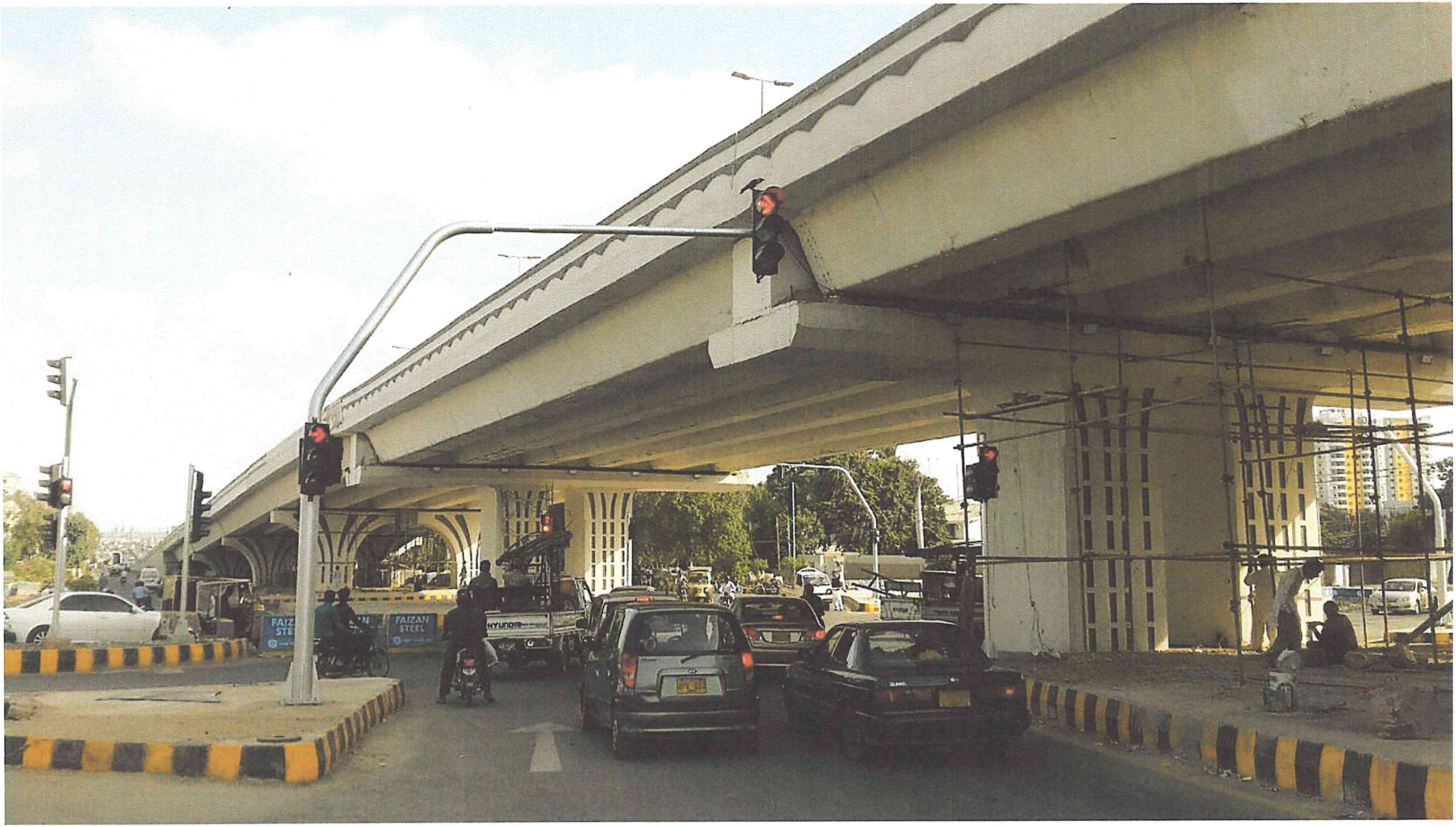




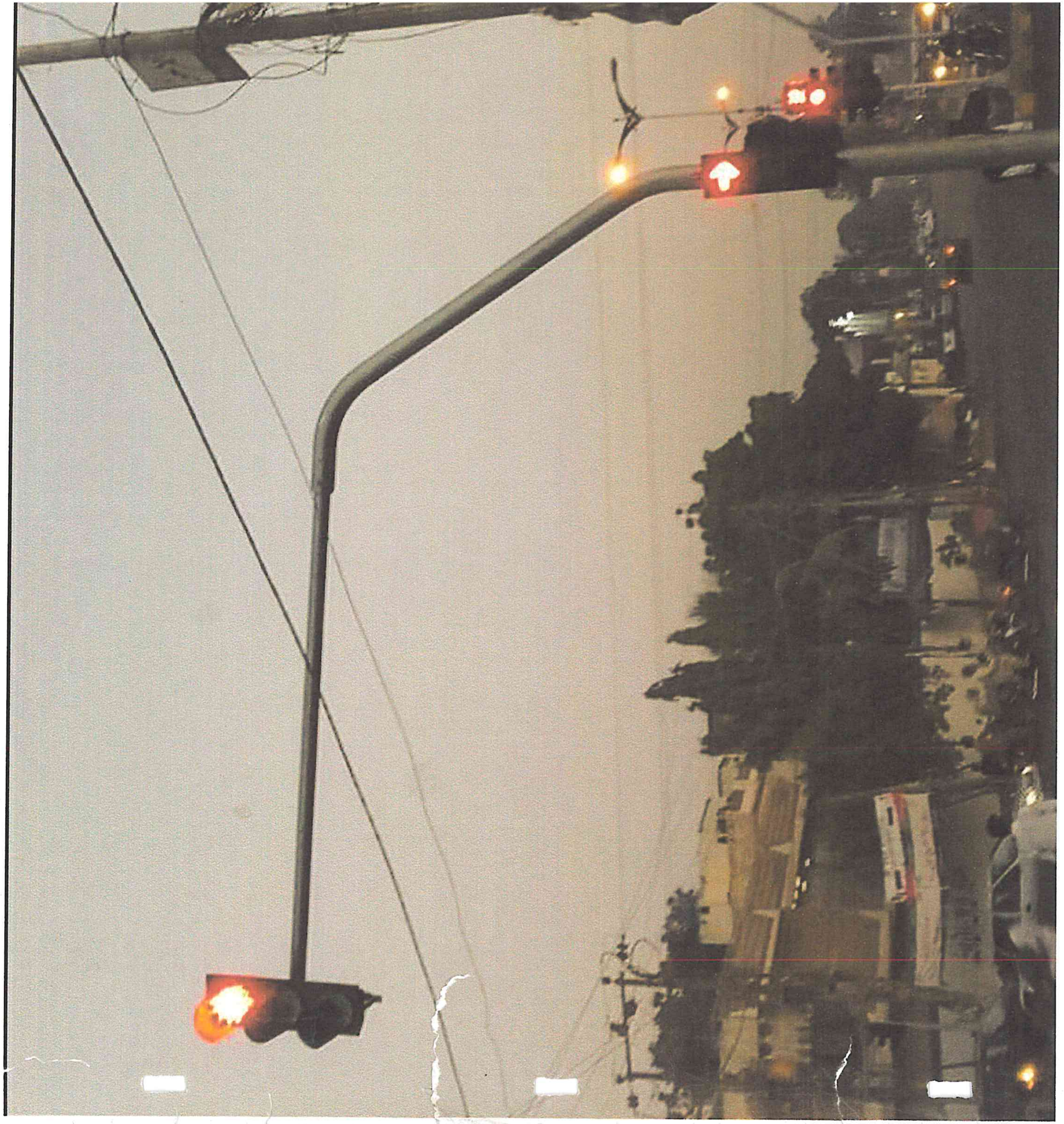

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257



252/A

BIDDING DOCUMENTS

BID EVALUATION REPORT

ADMINISTRATION APPROVAL

W: ORDER

MOM

252(B)

Annex-E

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT DEPARTMENT

SUBJECT: **ADMINISTRATIVE APPROVAL**

Sanction of the Government of Sindh is hereby accorded for issuance of Administrative Approval in respect of Up-Gradation of Traffic Signals in Karachi, Sukkur, Mirpurkhas and Larkana (ADP # 2246) 2016-17 for the current financial year 2016-17. The approved estimated cost Rs.143.220 Million the scheme was approved by the PDWP in its meeting held on 25-11-2016. Subsequently office Memorandum issued by the P&D Department vide letter NO.SO(DEV)-PDWP-9/337-P&D/2016, dated 05-01-2017.

2. The expenditure involved will be debited to the Head of Account "SC12053(053)-4 Economic Affairs (Capital) 045-Construction and Transport 0452 Road Transport-045203-Road Transport and SC-22051(51) Dev – Revenue 4-Economic Affairs-045-construction and Transport 0452 Road Transport-045203-Road.

3. All the required Codal formalities as laid down in this regard and Finance Department's instruction be followed.

SECRETARY TO GOVERNMENT OF SINDH

NO.SO(GEN.)/UGTS/ADP/2016-17 **Karachi, dated the January, 2017**

GOVERNMENT OF SINDH
FINANCE DEPARTMENT

A copy is forwarded to the Accountant General, Sindh for information and necessary action.

SECTION OFFICER (Dev-VI)

U.O. NO. FD(~~B&E-IX~~) SO(DEV-I)5(11)AA/2016-17 **Karachi, dated the 25th January, 2017**

A copy is forwarded for information and necessary action to:

1. The Chief (T&C), Planning & Development Department, Government of Sindh, Karachi.
2. The Additional Secretary (Dev.), Finance Department, Government of Sindh, Karachi.
3. The Chief (Dev.), Planning & Development Department, Government of Sindh, Karachi.
4. The Private Secretary to Secretary, Transport & Mass Transit Department, Government of Sindh, Karachi.
5. Office order file.

SECTION OFFICER (GEN)
For Secretary to Government of Sindh

252 (C)

No. TMTD/PMU/OL/2017-18/288
Project Management Unit (PMU)
Transport & Mass Transit Department
Government of Sindh
Dated: 06 02 2018

Tele. 021-35865392
Fax. 021-35865392

To,

M/S Silicon Communication & Security JV M/S Ghause Builders,
Suit -4, 2nd Floor, Namdar Square SB-12,
Askari Park Old Subzi Mandi,
Commercial Scheme No – 11
University Road Karachi

WORK ORDER

SUBJECT :- **TENDER FOR THE WORK OF UP GRADATION OF TRAFFIC SIGNALS IN KARACHI , SUKKUR, LARKANA & MIRPURKHAS**

In continuation of this office Acceptance letter No. TMTD/PMU/OL/2017-18/288 dated 08-01-2018 for subject mentioned work , the Contract Agreement, have been signed with your firm and Project Management Unit (PMU) TMTD, GoS, you are therefore directed to make arrangements for starting the work within 07 days of receipt of this Work Order and in this connection you are directed to contact the Project Director (PMU), Transport & Mass Transit Department GoS with following:

1. Please furnish schedule of work to be carried out at site along with Procurement Plan of material details so that the progress of work be monitor according to the schedule programme. Please note as per Contract Agreement Work must be completed within (09) months from the date of start of work in accordance with the contract agreement.

2. The progress report be submitted along with the photographs and support evidence and documents periodically as desired by the Project Director (PMU), TMTD, GoS to evaluate the progress of work.

252 (D) ANNEXURE B Annexure U

SINDH MASS TRANSIT CELL (SMTC), TRANSPORT & MASS TRANSIT DEPARTMENT, GOVERNMENT OF SINDH

DATED: 25-09-2017

BID EVALUATION REPORT

1. Name of Procuring Agency : SMTC (Transport and Mass Transit Department), GoS
2. Tender Reference/Sr. No : 32896
3. Tender Description/Name of Work : Installation/up-gradation of Traffic Signals work in Karachi, Larkana, Sukkar, Mirpurkhas
4. Method of Procurement : ~~Single Stage—Single Envelop~~ PRE-QUALIFICATION OF SUPPLIERS & CONTRACTORS (RULE 27)
5. Tender Published : Electronic Media as SPPRA dated 25-08-2017
6. Total Bids Documents Sold : 02 Nos
7. Total Bids Received : 01 No
8. Pre-qualification opening date : 12-05-2017
9. No. of Bid Technically Qualified : 02 No
10. Bid(s) Rejected at pre-qualified stage : 01 No
11. Financial Bid Opening Date : 11 September 2017
12. Technical Evaluation/prequalified : 02 proposals were qualified on the basis of evaluation criteria by the Procurement Committee

S.NO	Name of firm or Bidder	Cost offered by the bidder (As calculated)	Engineering Estimate of the Work	Comparison with estimate cost	Reason for acceptance / Rejection	Remarks
0	1	2	3	4	5	6
1	Silicon Communication & Security JV Ghause Builders	161.164 Million	143.22 Million	Bid is 12.5% Above than the Estimated Cost (s)	Qualified as per Eligibility Criteria	Only 1 firm has submitted the financial proposal which is evaluated by the procurement committee.

21.12.17 DIG (Traffic)

Qazi Abdul Qadir
Senior Director, TEB

Muhammad Tahir
DSP Traffic Police (on behalf of DIG Traffic Police)

Abdul Aziz,
Director Bus Ops & ITS, SMTC

Qasim Dada
Director Finance & Administration, SMTC

Yousuf Munir
Director Infrastructure, SMTC

Kashif Ali Khan
Deputy Director (Contracts & Procurement, SMTC

Muhammad Athar
Director General, SMTC

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT
DEPARTMENT

Tele. 021-35865392

25-09-2017

COMPARATIVE STATEMENT

S.NO	Firm Name	Bid Amount	Estimated Amount	Remarks
1	M/S Silicon Communication and Security JV Ghause Builders	Rs 161.164 (Million)	143.22 (Million)	Bid amount is 12.5% more than estimated amount

After detailed evaluation of bid, it has been noted that no Error/discrepancy was found in the Bid.

Qazi Abdul Qadir
Senior Director, TEB

Mohammad Tahir
DSP, Traffic Police On Behalf
Of DIG Traffic Police

21.12.17

Abdul Aziz
Director Bus Ops & ITS, SMTC

Qasim Dada
Director Finance & Administration,
SMTC

Yousuf Munir
Director Infrastructure,
SMTC

Kashif Ali Khan
Deputy Director,
Contract/Procurement, SMTC

Muhammad Athar
Director General, SMTC

252 (D)

Financial Review/Comparison Of Engineer Estimate And Bid Amount For New Traffic Signals to be Installed at Karachi, Sukkur , Larkana, Mirpurkhas

Item No	Desprietion	Qty	Unit	Bid Rate	Bid Amount	Engineer Estimate Rate	Engineer Estimate Amount	Difference Amount	%	Remarks
1	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED SILICON TRM 200 SERIES OR EQUVILENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING CONTROLLER CASE,CONTROLLER PLINTH	17	Nos	200,000	3,400,000	200,000	3,400,000	-		
2	INSTALLATION OF T-400 OR ST-800 CONTROLLER 16 OR 8 PHASE INCLUDING COMMISSIONING & TESTING WITH RE-BLOWING OF EPROM	11	Nos	8,000	88,000	12,000	132,000	-44000	-33.33	saving
3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY OR EQUIVALENT TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN	245	Nos	45,000	11,025,000	39,200	9,604,000	1,421,000	14.80	Excess
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO 3 WAY OR EQUIVALENT TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN. PROVIDING FIXING	95	Nos	55,000	5,225,000	49,000	4,655,000	570,000	12.24	Excess
5	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVALENT IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN. PROVIDING FIXING	148	Nos	29,000	4,292,000	26,500	3,922,000	370,000	9.43	Excess
6	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVALENT IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING DUAL COLOUR (RED & GREEN) IN ACCORDANCE WITH SPECIFICATION GIVEN. PROVIDING FIXING	64	Nos	17,000	1,088,000	15,000	960,000	128,000	13.33	Excess
7	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	72	Nos	1,150	82,800	1,000	72,000	10,800	15.00	Excess
8	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING PROVIDING FIXING	35	Nos	9000	315,000	16,500	577,500	-262500	-45.45	Saving

252 (P)

252 (R)

Item No	Despriction	Qty	Unit	Bid Rate	Bid Amount	Engineer Estimate Rate	Engineer Estimate Amount	Difference Amount	%	Remarks
9	PROVIDING & FIXING OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	98	Nos	16000	1,568,000	20000	1,960,000	-392000	-20	Saving
10	PROVIDING & FIXING CANTILEVER POLE ASSEMBLY WITH ALL NECESSARY FIYYING,POLE CAP ETC,COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	60	Nos	45000	2,700,000	70000	4,200,000	-1500000	-35.71	Saving
11	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES	5600	METER	650	3,640,000	590	3,304,000	336000	10.17	Excess
12	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE. 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	28	Nos	9650	270,200	8500	238,000	32200	13.53	Excess
13	PREPARATION OF INTERSECTION SPECIFICATION (IS) OF THE INDIVIDUAL INTERSECTION SITES BY CARRYING OUT TRAFFIC SURVEY (FOR PEAK HOURS) PLANING, SUPERVISION AND COLLECTION OF DATA, ANALYSIS AND RESULT FOR CUSTOMIZED THE TRAFFIC CONTROLLERS CLS PLANS AS WELL AS PHASE / STAGE TIMING FOR EACH JUNCTION SHALL BE PREPARED AND PROVIDED TO THE ENGINEER FOR APPROVAL IN DUPLICATE BOUNDED FORM INCLUDING TIMIMNG OF CONTROLLER UP DATING OF TIME PLANS	3	Nos	30000	90,000	85000	255,000	-165000	-64.71	Saving
14	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	700	METER	747	522,900	650	455,000	67900	14.92	Excess
15	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	170	Nos	7400	1,258,000	6500	1,105,000	153000	13.85	Excess
16	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	95	Nos	15000	1,425,000	16500	1,567,500	-142500	-9.09	Saving

252/P

252(P)

Item No	Despriction	Qty	Unit	Bid Rate	Bid Amount	Engineer Estimate Rate	Engineer Estimate Amount	Difference Amount	%	Remarks
17	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1" 8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED, LAYING OF PIPE PAINTING TWO COAT OF BITUMINOUS PAINT ON G.I PIPE PROVIDING AND PLACING OF DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT, TRAFFIC BARRIERS SAFETY DEVICES FOR PROTECTION OF TRAFFICAND DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITHIN THREE MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	2416	METER	3450	8,335,200	3000	7,248,000.00	1,087,200	15	Excess
18	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ½" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER	192	Nos	8600	1,651,200	7500	1,440,000.00	211,200	14.67	Excess
19	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	640	METER	550	352,000	480	307,200.00	44,800	14.58	Excess
20	PROVIDING & FIXING OF SILICON CD50 3 DIGIT DUAL COLOUR COUNTDOWN TIMER	101	Nos	35,000	3,535,000	34,000	3,434,000.00	101,000	2.94	Excess
21	LANE DEVICE AND MODEM	11	Nos	50,000	550,000	45,000	495,000.00	55,000	11.11	Excess
22	NET DEVICE WITH 12 MONTHS MONTHLY RENT	11	Nos	50,000	550,000	44,000	484,000.00	66,000	13.64	Excess
23	FISH EYE CAMERA	11	Nos	120,000	1,320,000	105,000	1,155,000.00	165,000	14.286	Excess
24	RG 45 CABLE FOR CAMERA	550	METER	115	63,250	100	55,000.00	8,250	15	Excess
	Total				53,346,550		51,025,200	2,321,350	4.55	Excess

252(P)

Financial Review Of Engineer Estimate And Bid Amount For up-gradation of Traffic Signals to be Installed at Karachi, Sukkur , Larkana, Mirpurkhas										
Item No	Despriction	Qty	Unit	Bid Rate	Bid Amount	Engineer Etimate Rate	Engineer Estimate Amount	Difference Amount	Difference (%)	Remarks
1	MONITORING ROOM PC-I3, 4.NOS, SERVER CORE I7, 01 .NO LED SCREEN 48 INCH 05 NOS. FURNITURE AND FIXTURES WITH GIE MAP.	1	JOB	5,700,000	5,700,000	5,000,000	5,000,000	700,000	14.00	Excess
2	PROVIDING FIXING & COMMISSIONING OF MCE 0141 MICROPROCESSOR BASED SIEMENS ST-950 SERIES OR EQUVELENT TRAFFIC SIGNAL CONTROLLER WITH 16 PHASE SWITCHES FITTED CUSTOMIZED INCLUDING SCOOT INTERFACE ENABLE ,CONTROLLER CASE ,CONTROLLER PLINTH	19	NOS	1,800,000	34,200,000	1,500,000	28,500,000	5,700,000	20.00	Excess
3	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVELENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	9	NOS	45,000	405,000	39,200	352,800	52,200	14.80	Excess
4	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVELENT 3 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + AMBER + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN	3	NOS	55,000	165,000	49,000	147,000	18,000	12.24	Excess
5	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVELENT IMPORTED 2 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED + GREEN) 200 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN.	8	NOS	29,000	232,000	26,500	212,000	20,000	9.43	Excess
6	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUVELENT IMPORTED 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY (RED) 200 MM DIAMETER AND HOOD COMPLETE HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION CATCH INCLUDING LED IN ACCORDANCE WITH SPECIFICATION GIVEN	2	NOS	17,000	34,000	15,000	30,000	4,000	13.33	Excess
7	PROVIDING ELECTRICAL CABLE (12 CORE 1.5 MM SQ. SOLID "CU" CONDUCTOR, PVC INSULATED, PVC BEDDED / PVC SHEATHED) INCLUDING LYING IN DUCT STRIP BACK TERMINATE AND LABEL ALL CORES INCLUDING TESTING COMMISSIONING CHARGES.	1610	METER	650	1,046,500	590	949,900	96,600	10.17	Excess

21.12.17

252(P)

Item No	Despriction	Qty	Unit	Bid Rate	Bid Amount	Engineer Etimate Rate	Engineer Estimate amount	Difference Amount	%	Remarks
8	PROVIDING & FIXING OF INCOMING KESC POWER SUPPLY METALLIC SWITCH BOARD OF SUITABLE SIZE AND STURDY DESIGN WATER / WEATHER PROOF HAVING LOCK & KEY ARRANGEMENT AND EQUIPMENT WITH FOLLOWING. 1) CIRCUIT BREAKER SINGLE PHASE 2) VOLTMETER, SINGLE PHASE (IMPORTED) APPROVED MAKE AND SIZE. 3) INDICATION LAMP.	1	NO	9650	9,650	8,500	8,500	1,150	13.53	Excess
9	SUPPLY AND LAYING ONE NUMBER BEST QUALITY 4" DIA G.I.PIPE IN DUCT UNDER ROAD CARRIAGEWAY FOOTWAY AS PER DRAWING / DESIGN INCLUDING BREAKING THROUGH SURFACE EXCAVATION UPTO MINIMUM DEPTH 1"-8" UNDER ROAD WAY AND 2"-8" FOOTWAY OR AS REQUIRED, PROVIDING SAND, STONE BALLAST FOR BACKFILLING COMPACTION, REINSTATEMENT OF ROAD OR FOOTWAY SURFACE AS PER SPECIFICATION AND APPROVAL OF THE ENGINEER INCLUDING CUTTING MAKING THREAD OF PIPE SPECIAL AS REQUIRED,	510	METER	3450	1,759,500	3,000	1,530,000	229,500	15.00	Excess
10	SUPPLY AND LAYING ONE NUMBER POLY VINYL CHLORIDE PIPE (PVC) "D" CLASS UNDER FOOTWAY FROM DRAWPIT TO SIGNAL POLE IN ACCORDANCE WITH SPECIFICATION AND DRAWING INCLUDING COST OF SPECIAL, CUTTING FITTING, LAYING ON PIPE IN TRENCH, SAND CUSHIONING, BACK FILLING, PROVIDING AND LAYING DRAW WIRE IN DUCT AND PROPER ARRANGEMENT OF LIGHT AND SAFETY DEVICES ETC. DISPOSAL OF SURPLUS EXCAVATED MATERIAL WITH 5 MILES LEAD AND COMPLETE WITH ALL RESPECT AS DIRECTED BY THE ENGINEER.	465	METER	747	347,355	650	302,250	45,105	14.92	Excess
11	INSTALLATION OF STANDARD POLE 12 FT ASSEMBLY WITH ALL NECESSARY FITTING POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.	6	NOS	1150	6,900	1,000	6,000	900	15.00	Excess
12	INSTALLATION OF MAST ARM POLE ASSEMBLY WITH ALL NECESSARY FITTING , POLE CAP ETC. COMPLETE INCLUDING PAINTING TWO COATS WITH SYNTHETIC ENAMEL PAINT AS PER DRAWING.PROVIDING FIXING	3	NOS	9000	27,000	16,500	49,500	(22,500)	-45.45	Saving

Item No	Despriction	Qty	Unit	Bid Rate	Bid Amount	Engineer Etimate Rate	Engineer Estimate amount	Difference Amount	%	Remarks
13	CONSTRUCTION OF STANDARD POLE FOUNDATION AS PER DRAWING	6	NOS	7400	44,400	6,500	39,000	5,400	13.85	Excess
14	CONSTRUCTION OF MAST ARM POLE FOUNDATION AS PER DRAWING	3	NOS	15000	45,000	16,500	49,500	-4500	-9.09	saving
15	PROVIDING CHAMBER 3"-0. 3"-0 2"-8" (MINIMUM DEPTH) AS PER APPROVED DESIGN FOR CABLE. DUCT DRAW CHAMBER AS SHOWN ON DRAWING AND PROVIDING RCC 1:2:4 COVER IN ¼" 3" * 3" MS ANGLE OF 30" OF SIZE AND ¼ THICK 3.25" * 3.25" MS ANGLE FRAME FIXED IN 1:2:4 CC WALL AND MAKING PROPER HOLES FOR DUCTING OF ALL SIZES IN WALLS INCLUDING EXCAVATED, BACKFILLING CC 1:2:4 BASE, WALL, SLAB CHAIN, CHAIN FIXING IN WALL AND SLAB, COMPLETE WITH ALL RESPECT AS DRAWING AND AS DIRECTED BY THE ENGINEER.	30	NOS	8600	258,000	7,500	225,000	33,000	14.67	Excess
16	PROVIDING & LAYING POWER CABLE 3 CORE 6MM	380	METER	550	209,000	480	182,400	26,600	14.58	Excess
17	DUAL COLOUR (RED+GREEN) COUNT DOWN TIMER 300 MM SIZE WITH TIMER CONTROLLER CABLE ETC.COMPLETE	75	NOS	35000	2,625,000	34,000	2,550,000	75,000	2.94	Excess
18	LANE DEVICE AND MODEM	19	NOS	50000	950,000	45,000	855,000	95,000	11.11	Excess
19	NET DEVICE WITH 12 MONTHS MONTHLY RENT	19	NOS	50000	950,000	44,000	836,000	114,000	13.64	Excess
20	FISH EYE CAMERA	19	NOS	120000	2,280,000	105,000	1,995,000	285,000	14.29	Excess
21	RG 45 CABLE FOR CAMERA	950	METER	115	109,250	100	95,000	14,250	15	Excess
22	PROVIDING & FIXING OF CONTROLLERS FOR TIDAL FLOW SYSTEM WITH GPS CLOCK TO BE SYNCHRONIZED IN TIME TO OPERATE THE LANE CONTROL LIGHTS.	5	NOS	350000	1,750,000	550,000	2,750,000	-1000000	-36.36	Saving
23	PROVIDING & FIXING OF SIEMENS TURKISH/ SWARCO OR EQUIVALENT 1 WAY TRAFFIC LIGHT ASPECT ASSEMBLY WITH TWO WAY ARROW CROSS LED MODULE (RED + GREEN) 300 MM DIAMETER AND HOOD COMPLETE. HOUSING & COVER MADE UV-STABILIZED POLYCARBONATE, COVER WITH SNAP ACTION	110	NOS	18000	1,980,000	20,300	2,233,000	-253000	-11.33	Saving
24	PROVIDING & FIXING OF LED TRAFFIC LIGHT MODULE WITH DUAL LANCE CENTRAL LIGHT SOURCE SYSTEM WITH NO LED DOTS VISIBLE , VERY UNIFORM SIGNAL GLOW-CENTRAL LIGHT SOURCE	492	NOS	12000	5,904,000	9,000	4,428,000	1,476,000	33.33	Excess
	Total				61,037,555		53,325,850.00	7,711,705.00	14.46	Excess

252(P)

252(D)

Schedule Rate / BOQ Of Civil work of Signal Work At Karachi, Larkana, Sukkur and Mirpur Khas

Item No	Despriction	Qty	Unit	Rate	Amount
1	DISMANTLING OF EXISTING ASPHALT CONCRETE ROAD I/E BASE,SUB BASE A DISPOSAL OF DISMANTLED MATERIAL TO DESIGNATED PLACE	48900	% CFT	773.86	378,417.54
2	EXCAVATION FOR FOUNDATION OF BUILDING, BRIDGES AND OTHER STRUCTURES INCLUDING DEGBELLING DRESSING, REFILLING AROUND STRUCTURE WITH EXCAVATED EARTH WATERING AND RAMMING LEAD UPTO 5 FT.	8400	% 0 CFT	3176.25	26,681.00
3	CEMENT CONCRETE PLAIN I/C PLACING, COMPACTING, FINISHING AND CURING ETC.	16632	%CFT	12595	2,094,800.40
4	P/F PRE CAST KERB STONE 3750 PSI INDUSTRIAL MADE SIZE 6 INCH THICK * 12 INCHES LONG * 12 INCHES HIGH INCLUDING THE COST OF CARTAGE, EXCAVATION,FORM WORK FOR HAUNCHING 1450 PSI LEAN CONCRETE,2250 PSI CONCRETE FOR HAUNCHING 1:4 CEMENT SAND MORTAR.	47200	RFT	297.01	14,018,872.00
5	P/F CEMENT PAVING BLOCKS FLOORING HAVING SIZE OF 197 * 197 * 60 (MM) OF CITY / QUDDRA / COBBLE SHAPE HAVING STRENGTH B/W 5000 PSI TO 6500 PSI INCLUDING FILLING THE JOINTS WITH HILL SAND AND LAYING IN SPECIFIED MANNER / PATERN AND DESIGN ETC. COMPLETE.	118000	SFT	199.77	23,572,860.00
6	CARTAGE OF ALL MATERIAL LEAD UPTO 10 MILES	48900	%CFT	1200.2	586,898.00
	Total				40,678,529.00

Bidder has quoted amount of 15% above on schedule item i.e.= 46,780,308.00

252(D)

Summary of Bid

S. No.	Description	Bid Amount
1	BOQ FOR NEW TRAFFIC SIGNALS(28 NO.) IN KARACHI, LARKANA, SUKKUR AND MIRPURKHAS	53.346 (M)
2	BOQ FOR UP-GRADATION OF (19 No.) SIGNALS IN KARACHI	61.037 (M)
3	SCHEDULE RATE / BOQ FOR NEW TRAFFIC INTERSECTION CIVIL WORK AT KARACHI, LARKANA, SUKKUR AND MIRPURKHAS	46.780 (M)
	Total	161.164 (M)

Total Bid Amount = 161.164 (Million)

Modified PC1 (A.D.P NO-2246) = 143.22 (Million)

Difference / Exceeded Amount 17.94 (Million)

Bid amount is 12.5% more than the Approved PC-1 Amount

252(E)

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT
DEPARTMENT

Reference No. 351 **dated** 7-2-2019

NOTE FOR CHAIRMAN PLANNING & DEVELOPMENT BOARD

SUBJECT: **COMPLETION OF ADP SCHEME NO. 1863 "INSTALLATION AND UPGRADATOIN OF TRAFFIC SIGNALS IN KARACHI, SUKKUR, MIRPURKHAS AND LARKANA" DURING CURRENT FINANCIAL YEAR 2018-19**

The Transport and Mass Transit Department, Government of Sindh, through Sindh Mass Transit Authority is working on **ADP Scheme No. 1863 "Installation/Up-gradation of Traffic Signals** work **in Karachi, Sukkur, Mirpurkhas and Larkana"** as an initiative to solve traffic regulatory issues including traffic congestion, regulatory and safety.

2. The Administrative Approval of the project was issued with the approved PC-I cost of PKR 143.220 million (**Annexure-I**). The procurement process was carried out as per SPPRA Rules, 2010 (Amended 2017) and Letter of Acceptance was issued to M/s Silicon Communication & Security JV Ghuase Builders (**the Contractor**) on 08-01-2018, at cost of PKR 161.164 million (**Annexure-II**).

3. Initially, the Contractor was mobilized and started work on the project at various locations in Karachi & Sukkur. The Finance Department, has released Rs. 35.806 million in the 1st & 2nd quarter of the current financial year 2018-19 against the allocation of Rs.71.610 million which have been utilized /paid to contractor against the work done in First Intern Payment Certificate (IPC). The silent features, financial input & progress etc is attached at **Annexure-III.**

4. It is highlighted that the tender cost of Rs. 161.210 million is 12.56% above (i.e within 15%) against the estimated cost of Rs. 143.220 million. As the scope of the scheme relates to remodeling of intersection geometry and installation of traffic signal, therefore manageable to complete by the end of June 2019 subject to providing / release of Rs. 125.404 million as per detail given below:-

S #	DESCRIPTION	RUPEES IN MILLION
i.	Release of balance against c.f.y allocation (allocation Rs. 71.610 million **minus** released Rs. 35.806 million)	35.806
ii.	Providing / release of difference of estimated cost & tender cost (estimated cost Rs.143.220 million **minus** tender cost Rs. 161.210 million)	17.990
iii.	Providing / release of difference of estimated cost & c.f.y allocation	71,610
	TOTAL	**125.404**

252(E)

5. Re-appropriation of Rs. 89.598 million is proposed from ADP Scheme No. 1867 **"Integrated Intelligence Transportation System for Karachi"** to the subject ADP Scheme No. 1863 "**Installation and Up-gradation of Traffic Signals in Karachi, Sukkur, Mirpurkhas and Larkana**" to meet out the total requirement of Rs. 125.404 million (difference of total requirement & balance release against allocation as at para 4 above).

6. Besides above, change of location from Mirpurkhas to Shaheed Benazirabad is also proposed in view of prevailing traffic and transport situation as well the requirement of signalization at priority intersections in Shaheed Benazirabad (Nawabshah). Moreover, the number of intersections (i.e. 05 No) will remain same. The locations of Mirpurkhas as per the original scope and proposed locations of Shaheed Benazirabad (Nawabshah) are attached at **Annexure-IV**. However, Mirpurkhas Division would be included in the ADP of next financial year (2019-20).

7. In view of the above position following proposal is submitted for approval.

i. Re-appropriation / release of Rs. 89.598 million from ADP Scheme No. 1867 "**Integrated Intelligence Transportation System for Karachi**" to the subject ADP Scheme No. 1863 "**Installation and Up-gradation of Traffic Signals in Karachi, Sukkur, Mirpurkhas and Larkana**".

ii. Release of remaining allocation of Rs. 35.806 million.

iii. Change of location from Mirpurkhas to Shaheed Benazirabad.

8. Worthy Chairman P&D Board may kindly approve the proposal at para 7 above.

07/02/19

(MUHAMMAD AKHTAR GHORI)
Secretary to Government of Sindh

9. **MINISTER, T&MTD**

13/2/2019.

10. **CHAIRMAN P&D BOARD**

Diary No. 40/C
14-02-2019

No: PS/Chairman, P&D
File Dy. #. 257
Dated: 13/2

INWARD
PS/MIN/T&MT/201
110
8/2/19

OUTWARD
PS/MIN/T&MT/201
No 50 Date 13-02-19

Member E. I P&D
Dy. No 178 Date 14-2-19

252(E)

GOVERNMENT OF SINDH
PLANNING & DEVELOPMENT DEPARTMENT

SUBJECT: COMPLETION OF ADP SCHEME NO. 1863 "INSTALLATION AND UPGRADATION OF TRAFFIC SIGNALS IN KARACHI, SUKKUR, MIRPURKHAS AND LARKANA" DURING CURRENT FINANCIAL YEAR 2018-19

10. The Transport & Mass Transit Department may approach for the release of remaining funds of the current year (2018-19) allocation for the subject scheme directly with Finance Department as per the Release Strategy conveyed. Meanwhile revised PC-I for change in scope be submitted for processing and approval. The award of contract beyond the approved cost, but within permissible limit, may also be justified with detailed clarification in the revised PC-I document. The Note as such is returned.

No. PS/Chairman, P&DD Note/Sum
Inward # Dated
Outward # 257 Dated 20/2/19

(Muhammad Waseem) 20/2/19
Chairman
Planning & Development Board

11. SECRETARY, TRANSPORT & MASS TRANSIT

No. PS/SECY/ 9/
Dated: 20/02/2019
TRANSPORT DEPTT.

Letter issued to F.D for release of balance of R 35.806M for the reasons as at para 3 as F/A.

12 M.D/SMTA to submit revised PC-I in line with para 10 above on priority basis

21/2/19

1265 26/02/19

13 MD/SMTA

14 [illegible] to SO (G) for settlement)

15. [illegible]

252(F)

Government of Sindh

Transport & Mass Transit Department

Dated July 24th, 2017

Minutes of Procurement Committee Meeting on Up-Gradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas, Nawabshah & Larkana Project

A meeting of Procurement Committee for the Up-gradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas, Nawabshah & Larkana Project (the **"Project"**) was held on Monday, 24th July 2017 at the Committee Room, Abdul Sattar Edhi Line (Formerly Orange Line) PMU Office, Sindh Mass Transit Cell, Government of Sindh under the chairmanship of Director General, SMTC. The meeting was convened to discuss the evaluation of proposals submitted for prequalification. The list of participants and attendance sheet copy is attached as [**Annexure-A**].

2. The Chair initiated the discussion by welcoming the participants. The forum was informed that three prequalification documents were submitted by the following companies;

i. M/S Silicon Communication & Security
ii. ~~M/S Silicon Communication & Security JV M/S Ghause Builders~~
iii. M/S Pak German Engineers

These prequalification documents were opened and signed by the committee members before the authorized representative of bidders.

4. M/s Silicon Communication & Security has submitted the documents as an individual lead firm (i, reflected above) and a lead firm with a joint venture (ii, reflected above). However, the procurement committee decided that a firm can be a lead firm either individually or with a JV but not with both. Hence, the technical proposal from M/s Silicon Communication & Security has been disqualified as an individual lead firm.

5. The committee members went through the evaluation of the remaining two technical proposals. Since the prequalification criteria asked for the working experience with SCOOT based UTC controllers / system, M/s Pak German Engineers was held qualified <u>only</u> on the condition that they will submit their <u>*authorization certificate*</u> from suppliers of SCOOT based system at the bidding stage [**Annexure – B**].

6. The committee discussed the evaluations and agreed on the following scoring,

	M/S Silicon Communication & Security JV M/S Ghause Builders	M/S Pak German Engineers
Working Experience	35	25
Financial Status	28	26
Strength of Engineering Establishment	27	24
Total	**90**	**75**

7. The procurement committee agreed to issue notice of prequalification to M/s Silicon Communication & Security JV M/S Ghause Builders and M/s Pak German Engineers (subject to the condition of submitting the authorization letter as mentioned above), since the minimum requirement to qualify is 70 score out of 100.

Qazi Abdul Qadir
Senior Director, TEB

Muhammad Tahir
DSP Traffic Police (on behalf of DIG Traffic Police)

Sardar Abdul Nabi Thameem
Senior Chief T&C, P&D

Abdul Aziz,
Director Bus Ops & ITS, SMTC

for Qasim Dada
Director Finance & Admin, SMTC

Yousuf Munir
Director Infrastructure, SMTC

Muhammad Athar
Director General, SMTC

252(F)

UP-GRADATION / INSTALLATION OF TRAFFIC SIGNALS
IN KARACHI, HYDERABAD, SUKKUR, MIRPURKHAS, NAWABSHAH AND LARKANA

Attendance Sheet

Dated: 24/07/2017

S.No.	Name	Designation	Department / Company	Contact Number	Email	Signature
1	Muhammad Athar.	DG (SMTC)				[signature]
2	Muhammad YOUSUF Munir					[signature]
3	DSP TAHIR	DSP / on behalf DIG Traffic.				[signature]
4	Kashif Ali	D.P.D Cont/Procurement	SMTC.	0333-2633471		[signature]
5	Abdul Qadir	Sr. Director TEB	TEB, KDA	03332147480		[signature]
6	Abdul Aziz	Director	SMTC	—		[signature]
7	Shumaila c/o Qassim Dada	Asst. Director	PPP Node, SMTC	—		[signature]
8	SARDAR ABDUL NABI THAMEEM	Senior Chief (TJC)				[signature]
9						
10						
11						
12						
13						
14						

252(F)

Evaluation of PreQualification Documents - UP-GRADATION / INSTALLATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKUR, MIRPURKHAS, NAWABSHAH AND LARKANA

PART – A (WORKING EXPERIENCE)
(35 MARKS)

a) **Working Experience**	(0-25)	M/S Silicon JV M/s Ghause Builders	M/s Pak German Engineers
i) Allied Traffic Engineering Works Experience Last Continuous 5 years Last Continuous 08 years (Attach PEC Valid License for each year).	5 10	10	10
ii) Specific Traffic Signal (Scoot based controllers / System) Experience For 2 similar projects within the last eight (8) years Over Rs 50 million. Two marks for each additional 01 similar project	(0-10)	10	0
Current Commitments / Work in Hand 02 projects in hand Deduction of 01 mark for each additional one project	(0 – 5) 05	5	5
b) **Tools / Machinery**	(0 – 10)		
i)System tool Equipment (as specified below)	5	5	5
ii) E-Prom blowing software	3	3	3
iii) Material stock in hand	2	2	2

252(F)

PART – B (FINANCIAL STATUS)
(35 MARKS)

1)		M/S Silicon JV M/s Ghause Builders	M/s Pak German Engineers
2) Average Net Worth for last 05 years Rs. 50 Million One mark addition for each increment of Rs. 12 Million One mark deduction for each decrement of Rs. 12 Million	(0 – 5) 03	3	3
3) Average Net Working Capital for last 05 years Rs. 25 Million One mark addition for each increment of Rs. 10 Million One mark Deduction for each decrement of Rs. 5 Million	(0 – 05) 3	3	3
4) Average Annual Construction Turnover Rs. 30 Million One mark addition for each increment of Rs. 100 Million One mark Deduction for each decrement of Rs. 100 Million	(0 – 15) 12	12	10
5) Cash Flow Requirement (Attach proof of Bank Statement / Credit Facilities / etc.) - Less than 15% of this Work - Upto 25% of the work - Upto 50% of the work - More than 50% of this work	0 – 10 0 4 8 10	10	10

252(F)

PART – C (STRENGTH OF ENGINEERING ESTABLISHMENT)
(30 MARKS)

		M/S Silicon JV M/s Ghause Builders	M/s Pak German Engineers
A. Project Engineer (must be registered with PEC)	10		
i) Project Manager Experience 08 or more years Experience as Project Manager 05 or more years Experience as Project Manager Less than 05 years Experience		5	5
ii) Specific experience Should be at least 05 years Less than 05 years		5	5
B. SYSTEM ENGINEER (Must be registered with PEC)	8		
i) System Engineer Experience 08 or more year Experience 04 or more year Experience Less than 04 year experience		5	2
ii) Specific experience Should be at least 05 years Less than 05 years		0	0
C. SITE ENGINEER (CIVIL)	3		
i) Site Engineer Experience	2	2	2
05 or more year Experience	2		
03 or more year Experience	1		
Less than 03 year Experience			

252(F)

ii. Specific experience Should be at least 03 years Less than' 03 years	01 00	1	1
D. SITE ENGINEER (ELECTRONICS) For each (Must be registered with PEC) Site Engineer Experience 05 or more year Experience 03 or more year Experience Less than 03 year Experience	2 2 2 1 0	2	2
TECHNICIAN (2 Nos) For each i. Experience 08 or more years experience 05 or more years Experience Less than 05 years Experience	04 Marks 4 4 3 0	4	4
SKILLED LABOUR i. 05 or more years experience 03 or more years experience Less than 03 years experience ii) Specific experience Should be at least 03 years Less than 03 years	3 2 1 0 1 1 0	2 1	2 1

252(F)

GOVERNMENT OF SINDH
TRANSPORT AND MASS TRANSIT DEPARTMENT

SAY NO TO CORRUPTION

Off. No.021-99211017 Fax No.021-99211298
E.mail.secretarytransportsindh@gmail.com

NOTIFICATION

NO: SO(G)/T.SIGNALS/2017: Transport and Mass Transit Department, Government of Sindh has undertaken the work of **"Installation / Up-gradation of Traffic Signals in Karachi, Sukkur, Mirpurkhas, Larkana, Nawabshah and Hyderabad** through Sindh Mass Transit Cell (SMTC).

In this regard, the TMTD, GoS, in compliance with Rule 67 of Sindh Public Procurement Rules, 2010 hereby constitutes the Procurement Committee with the following composition and terms of reference:

S.NO.	DESIGNATION	STATUS
1.	Director General, SMTC, TMTD, GoS.	Chairman
2.	Senior Chief (T&C), Planning and Development Department, GoS.	Member
3.	Deputy Inspector General of Traffic Police, Karachi.	Member
4.	Mr. Abdul Qadir, Senior Director, Traffic Engineering Bureau.	Member
5.	Director Infrastructure, SMTC, GoS.	Member
6	Director Bus Operation and ITS, SMTC, TMTD, GoS.	Member
7.	Director Finance and Administration, SMTC, TMTD, GoS.	Member

TERMS OF REFERENCE:

1. The Procurement Committee shall approve Request for Qualification (RFQ) document for issuance.
2. Short listing of contractor, responding to the RFQ, where applicable, in accordance with the criteria mentioned in RFQ document.
3. The Committee shall evaluate prequalification proposals, according to selection method and evaluation criteria, mentioned in the RFQ document and shall approve the issuance of Request for Proposals(RFP) to successful prequalified bidders;
4. Finalization of recommendation based on evaluation of RFP as mentioned in (3) above as per SPPRA Guidelines.

TUAHA AHMED FARUQUI
SECRETARY
Transport and Mass Transit Department

NO:SO(G)/T.SIGNALS/2017:

Karachi, dated the 19th April, 2017

1. Chairman / Member (all of the Committee).
2. The PS to Chairman (Planning Board), Government of Sindh, Karachi.
3. The PS to Secretary Finance Department, Government of Sindh, Karachi.
4. The PS to Secretary, Transport and Mass Transit Department, Government of Sindh, Karachi.
5. The PS to Director General , SMTC, Government of Sindh, Karachi.
6. Notification File.

SECTION OFFICER (G)
FOR SERETARY TO GOVERNMENT OF SINDH

252(G)

Government of Sindh

Transport & Mass Transit Department

Dated September 11th, 2017

Minutes of Procurement Committee Meeting on Up-Gradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas, Nawabshah & Larkana Project

A meeting of Procurement Committee for the Up-gradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas, Nawabshah & Larkana Project (the **"Project"**) was held on Monday, 11th September 2017 at the Committee Room, Abdul Sattar Edhi Line (Formerly Orange Line) PMU Office, Sindh Mass Transit Cell, Government of Sindh under the chairmanship of Director General, SMTC. The meeting was convened for the opening of Financial Bids of the Project invited from the prequalified contractors, i.e M/S Silicon Communication & Security JV M/S Ghause Builders and M/S Pak German Engineers. The list of participants and attendance sheet copy is attached as [**Annexure-A**].

2. The Chair initiated the meeting by welcoming the participants. The committee was informed that the bid submission deadline was 3:00p.m on 11th September 2017 and that only one bid was submitted from M/S Silicon Communication & Security JV M/S Ghause Builders by the deadline.

3. The committee was informed that a letter was received from M/S Pak German Engineers on Friday, 8th September 2017 at 5:30p.m via email communication requesting the extension in the bid submission deadline citing technical reasons of completing the documentation works. The committee was informed that considering the tight timelines and clear mentioning of the prerequisites in the RFQ and Tender documents, it was communicated to the said contractor that the extension cannot be granted.

4. The sealed Bid from M/S Silicon Communication & Security J.V M/S Ghause Builders was opened and its total bid cost [PKR 161,164,413/=] was announced before the committee and the bidder. The committee members signed the bid documents. The Bid security of 2% was attached with the bid in the form of pay order.

ATTENDANCE SHEET (Bidders)

Bid opening meeting on 11/09/2017 at 04:00 p.m. in PMU office (SMTC),Transport and Mass Transit Department Near Teen Talwar Clifton, regarding installation/up-grdation of signal workat Karachi, Sukkur, Larkana,Mirpurkhas

S.NO	NAME	DESIGNATION	DEPARTMENT	CONTACT NO.	EMAIL	SIGNATURE	REMARKS
	Shakeel Manawar	Ghause Builder Proprietor	Silicon Communication & Security Tr	0300-9221346		Shakeel	
	FAISAL SATTAR	MD	Ghause Builder	0300 8203293		[signature]	

252(G)

ATTENDANCE SHEET (Procurement Committee)

Bid opening meeting on 11/09/2017 at 04:00 p.m. in PMU office (SMTC),Transport and Mass Transit Department Near Teen Talwar Clifton, regarding installation/up-grdation of signal workat Karachi, Sukkur, Larkana,Mirpurkhas

S.NO	NAME	DESIGNATION	DEPARTMENT	CONTACT NO.	EMAIL	SIGNATURE	REMARKS
1-	Muhammad Athar	DG SMTA	TMTD				
2	Tahir Khan	DSP Traffic	Traffic	03002334345			
3.	Abdul Aziz	Director Bus OPS/ITS	SMTC	-			
4.	YOUSUF	DIRECTOR (INFRA)	SMTC				
5	Qazi Abdul Qadir	Senior Director	TEB, KDA	0333-2147480			
6	Qassim Dada	DIR (F&A)	SMTC				
7.	Kashif Ali	D.D (Procurement)	SMTC	0335-2633972			

252(H)

Government of Sindh
Transport & Mass Transit Department
Dated September 25th, 2017

Minutes of Procurement Committee Meeting on Up-Gradation / Installation of Traffic Signals in Karachi, Sukkhur, Mirpurkhas & Larkana Project

A meeting of Procurement Committee for the Up-gradation / Installation of Traffic Signals in Karachi, Sukkhur, Mirpurkhas & Larkana Project (the **"Project"**) was held on Monday, 25th September 2017 at the Committee Room, Abdul Sattar Edhi Line (Formerly Orange Line) PMU Office, Sindh Mass Transit Cell, Government of Sindh under the chairmanship of Director General, SMTC. The meeting was convened to discuss the evaluation of tender documents, submitted and opened on 11th September 2017 from M/S Silicon Communication & Security JV M/S Ghause Builders. The list of participants and attendance sheet copy is attached as **Annexure-A.**

2. The Chair initiated the meeting by welcoming the participants. The Deputy Director [Contracts & Procurement] informed the committee that the tender document from M/S Silicon Communication & Security JV M/S Ghause Builders was subjected to evaluation and no discrepancies were found in the calculations. The Bid Evaluation Report is attached as **Annexure B**. It was informed to the committee that the Bid Security of PKR 3,267,000/= was submitted along with the tender document as a part of the requirement.

3. The committee agreed to proceed with the tendering process and provide M/S Silicon Communication & Security JV M/S Ghause Builders, letter of award as a successful contractor for the said project.

4. The Chair thanked the committee members and the meeting was adjourned.

Qazi Abdul Qadir Senior Director, TEB	Muhammad Tahir DSP Traffic Police (on behalf of DIG Traffic Police)	Abdul Aziz, Director Bus Ops & ITS, SMTC
Qasim Dada Director Finance & Admin, SMTC	Yousuf Munir Director Infrastructure, SMTC	Kashif Ali Khan Deputy Director, SMTC

Muhammad Athar
Director General, SMTC

257(H)

UP-GRADATION / INSTALLATION OF TRAFFIC SIGNALS

IN KARACHI, HYDERABAD, SUKKUR, MIRPURKHAS, NAWABSHAH AND LARKANA

Attendance Sheet (Committee Members)

Dated: 25/9/2017

S.No.	Name	Designation	Department / Company	Contact Number	Email	Signature
1	Abdul Aziz	DIRECTOR BCS OPS	SMTC			[signature]
2	Muhammad Yousuf Munir	DIRECTOR (INFRA) SMTC	SMTC			[signature]
3	Tahir Khan	DSP (TRAFFIC)	TRAFFIC POLICE			[signature]
4	Qasim Dada	DIR (F&A)	SMTC			[signature]
5	Muhammad Athar	DG	SMTC			[signature]
6	Kashif Ali Khan	Deputy Director	SMTC			[signature]
7	Qazi Abdul Qadir	Senior Director	TEB, KDA	0333-2147480		[signature]
8						
9						
10						
11						
12						
13						
14						

ANNEXURE A

SO(Vig)3(67)ADP/1902/2021

GOVERNMENT OF SINDH

TRANSPORT & MASS TRANSIT DEPARTMENT

Karachi Dated the 4th Feburary , 2021

To,

1. The Deputy Inspector General of Police (Traffic)
   Karachi.

2. The Senior Director,
   Traffic Engineering Bureay (TEB),
   Karachi Develpoment Authority (KDA),
   Karachi

3. The Managing Director (MD),
   Sindh Mass Transit Authority (SMTA),
   Karachi.

4. The Chief (Transport),
   Planning and Development Department,
   Karachi.

SUBJECT: MINUTES OF THE MEETING REGARDING ADP SCHEME NO.1902, "UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKUR, LARKANA AND MIRPURKHAS (PHASE-1)".

I am directed to refer to the subject captioned above and to enclose herewith minutes of the meeting held on ***29th*** January***, 2021 at 11:00 am*** under the Chairmanship of Mr. Shariq Ahmed, Worthty Secretary, Transport & Mass Transit Department, Government of Sindh, in the Committee Room of Transport and Mass Transit Department located on 2nd Floor Tughluq House, Sindh Secretariat -2 Karachi, for kind information and necessary action please.

04/02/2021

(DR. RASHID ALI-PMS)
SECTION OFFICER (VIGILANCE)
For Secretary to Government of Sindh

A copy is forwarded for information to:

1. P.S to Minister, Transport and Mass Transit, Sindh
2. P.S to Secretary, Transport & Mass Transit Department, Karachi.
3. Master file.

12/02/2021

Khan Shah

SECTION OFFICER (VIGILANCE)

Do the due diligence and followup 12/02/2021

SMTA / MTD
04-02-2021

252(I)

GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT
DEPARTMENT

Karachi, dated 4th February, 2021

<u>MINUTES OF THE MEETING REGARDING ADP SCHEME NO.1902, NAMELY " UP-GRADATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKUR, LARKANA AND MIRPURKHAS (PHASE-1).</u>

A meeting on the subject captioned above was held on 29th January 2021 at 11:00 AM in the Committee Room of Transport and Mass Transit Department (TMTD), Government of Sindh, under the Chairmanship of Worthy Secretary, Transport & Mass Transit Department.

The list of participants is attached at (Annexure-1)

The meeting started with the recitation from Holy Quran. After recitation, the participants introduced themselves and the chair welcomed the participants. After round of introduction. The chair apprised the forum about the purpose of meeting. The Section Officer (Vigilance) informed the forum about the agenda of the meeting, given as under:-

<u>AGENDA OF THE MEETING:</u>

1. To examine the present status of ADP scheme. **(XEN SMTA may brief).**
2. Submission of revised PC-1 of the said ADP scheme (due to difference of **18** million rupees between **<u>estimated cost</u>** and **<u>tender cost</u>**). **(XEN SMTA may apprise).**

3. MEC report is **un-satisfactory** on the said ADP scheme. Recent development is to be otained from **XEN SMTA.**
4. Identification of new locations for installation and up gradation of traffic signals in Karachi instead of Hyderabad and Mirpurkhas. **(DIG Traffic may apprise about new locations in Karachi).**
5. Maintenance of traffic signals **(Senior Director KDA may apprise)**

The Section Officer (Vigilance) briefed the forum about the prevalent status of the said ADP Scheme as following:-

BRIEF DESCRIPTION OF ADP SCHEME:

1. Scheme approved with the estimated cost of **143.220** million rupees.
2. Sindh Mass Transit Authority (SMTA) is the executing agency.
3. Tender cost is **161.16** million rupees (**18** million rupees above the estimated cost without administrative department and P&D approval).
4. Allocation for 2020-21 is **107.41** million rupees.
5. Funds utilized till now are **70.12** million rupees.

Progress report of the ADP Scheme is attached at (Annexure-II)

2. The Chair showed displeasure and inquired the XEN SMTA about the anomaly of tender cost above the estimated cost. XEN SMTA responded that, this tender was awarded prior to my appointment as XEN and for that tender cost, the then Secretary TMTD gave the approval for that, which is on record. The Chair responded that, the then Secretary TMTD was not the competent authority to do so as the appropriate forum for the approval is PDWP. The Chief (Transport), P&D intervened and told the forum that prior approval was needed which was not taken. At this moment, revision of PC-1 is the need of the hour. For that, PC-1 of the said ADP scheme may be revised earlier and placed before the concerned forum i.e. PDWP forum for its approval. Director Infrastructure SMTA responded to Chief (Transport)

that revised PC-1 is ready only new locations for installation of Traffic Signals in Karachi are awaited from DIG Traffic to be incorporated in the same.

3. Section Officer (Vigilance) apprised the forum that Revised PC-1 may not be approved from PDWP forum as recently P&D Department issued a circular that those ADP Schemes may not be revised whose MEC report is **Un-Satisfactory** and the MEC report on the said ADP Scheme is **Un-Satisfactory**. Resultantly, Finance department has also stopped the release of funds. Responding to that, XEN SMTA said that MEC team visited the sites in Larkana on 12th of January 2021. Apparently, they were satisfied with the work done as per PC-1. The Chair then directed SO (Vigilance) to convene a meeting with MEC, P&D Department in next week to get their view point on the status of the said ADP Scheme .

4. The traffic signals which are to be installed in Hyderabad and Mirpurkhas may be re-located and installed in Karachi. For that, DIG Traffic may provide new locations in Karachi. DIG Traffic provided a list consisting of locations, where new traffic signals are to be installed. The Chair inquired the SMTA representatives about availability of funds for the same. The XEN SMTA replied that about 30 million rupees are there, which can be utilized. The chair then consented positively that until MEC report comes Satisfactory, the available funds may be utilized for installation of new traffic signals in Karachi instead of Hyderabad and Mirpurkhas.

5. The Chair then inquired the representatives from TEB and Traffic police about maintenance and operation of Traffic Signals. Representative of Traffic Engineering Bureau TEB apprised the forum that traffic signals are maintained by TEB and operated by Traffic Police. The Chair emphasized that the mandate to maintain and operate Traffic Signals belongs to TEB. On that, the Chief (Transport), P&D raised a valid point that as per PC-1 of the said ADP Scheme, Control Room is to be established. The Director Infrastructure responded that the there are two phases of the said ADP Scheme and establishment of Control room is the part of 2nd phase. Whereas, phase-1 includes the installation and up-gradation of Traffic Signals. For establishment of Control Room, several locations came

under discussion. The opinions from representatives of TEB, KDA, Traffic Police, P&D and SMTA were sought for that. The Chair also opined various locations for the same. In the end, the Chair directed that Control room is the part of 2nd Phase, so its need of the hour to concentrate and focus on on-going Phase-1.

DECISIONS TAKEN:

S.NO	DECISION TAKEN	ACTION BY
01	Available funds may be utilized for installation of new traffic signals in Karachi instead of Hyderabad and Mirpurkhas.	XEN SMTA
02	Efforts may be taken for satisfactory report to be gained from MEC, P&D Department.	XEN SMTA
03	Meeting may be convened in next week with MEC, P&D.	SO (VIGILANCE)
04	Revised PC-1 may be submitted as soon as possible	XEN SMTA
05	Establishment of Control Room	MAY BE INCLUDED IN PHASE-2

The meeting ended with a vote of thanks to and from the Chair.

****

ATTENDANCE SHEET

MEETING REGARDING ADP SCHEME NO 1902, NAMELY, "UP GRADATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKUR, LARKANA AND MIRPURKHAS (PHASE-1).

Dated: 29th January, 2021 **at 11:00 A.M**

S.No.	Name	Department with Designation	Mobile No.	Signature
1.	Mr. Shariq Ahmed	Secretary, TMTD		In-Chair
2.	Engr. Khalid Hafeez	Sr. Director TEB.	0333/8348121	[signature]
3.	Syed Muhammad Azeem	A.T.E.	0321/8939919	[signature]
4.	Syed Khan Muhammad Shah	XCN EMTA.	0332-2980656	[signature]
5.	Rashid Ali	SO (Vigilance)	0333-8281115	[signature]
6.	IQTIDAR AHMED	M.D SMTA	0333-2276110	[signature]
7.	M. Ahmed Baig	SP Traffic rep. DIG Traffic	0300-2074173	[signature]
8.	Sikandar Ali Shah	P.O D Deputy Chief (Transport)	0306-2793732	[signature]

252(I)

ADP	Name	Status Approved / Un Approved	Executing Agency	Estimated Cost	Expenditure	Allocation For 2020-2021 (In Millions)		Funds Released 2020-21		Expenditure 2020-2021		Remarks/ Present Status
						CAPITAL	REV	CAPITAL	REV	CAPITAL	REV	
1902	UP GRADATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKUR, LARKANO & MIRPURKHAS (PHASE-1)	APPROVED	SMTA	ESTIMATED COST: 143.220 (M) TENDER COST: 161.16 (M)	70.12 (M)	107.414 (M)	0.00	35.447 (M)	0.00	0.00	0.00	PC-1 WILL BE REVISED BECAUSE WORK ORDER HAS BEEN ISSUED ABOUT 12.56% ABOVE THE ESTIMATED COST AND CHANGE OF LOCATIONS IN INSTALLING TRAFFIC SIGNALS. MEC, P&D RAISED OBJECTIONS ON THE WORK DONE. FD STOPPED RELEASING OF FUNDS OWING TO UN-SATISFACTORY REPORT BY MEC. MEC VISITED THE SITES ON 12TH JANUARY 2021.
I)	KARACHI (NEW SIGNALS)			86.384381 (M)	59.072020 (M)							11 TRAFFIC SIGNALS WERE TO BE INSTALLED. OUT OF 11 SIGNALS, 07 HAVE BEEN INSTALLED, 04 STILL REMAINING.
	KARACHI SIGNALS UP-GRADATION.											19 TRAFFIC SIGNALS WERE TO BE UP GRADED. 15 TRAFFIC SIGNALS HAVE BEEN UP-GRADED AND FOUR (04) STILL REMAINING.
II)	HYDERABAD			00.000	00.000							DISTRICT ADMINISTRATION REFUSED TO INSTAL THE TRAFFIC SIGNALS.
III)	SUKKUR			20.348134 (M)	8.146370 (M)							6 TRAFFIC SIGNALS WERE TO BE INSTALLED. OUT OF 6, 3 TRAFFIC SIGNALS HAVE INSTALLED, 3 REMAININIG.
IV)	LARKANO			15.566240 (M)	4.635072 (M)							FIVE TRAFFIC SIGNALS WERE TO BE INSTALLED. ALL FIVE SIGNALS HAVE BEEN INSTALLED. WORK COMPLETED.
V)	MIRPURKHAS			20.919134	00.000							NOT FEASIBLE.

No.INFRA/SMTA/SIG/2021/[illegible]

GOVERNMENT OF SINDH

SINDH MASS TRANSIT AUTHORITY

O/C

Dated: 28th May, 2021

To,

Executive Engineer
Chairman Procurement Committee,
Engineering Department,
Karachi Development Authority
Karachi.

SUBJECT: INSTALLATION / UP GRADATION OF TRAFFIC SIGNALS IN KARACHI, SUKKUR, LARKANA AND MIRPURKHAS ADP 2020-21 SCHEME NO 1902

I am directed to refer your office letter No. EE/ED/KDA/2021/130 dated 17th May 2021 and EE/ED/KDA/2021/117 dated 28th April 2021 regarding the subject matter.

As stated in letter No. So(Via)3(107) ADP /1902/2021 dated 29th April 2021, if was clearly stated that Transport & Mass Transit Department, GoS has undertaken the subject project whose original scope include 11 locations for new signals and 19 locations for signals up gradation work, including up gradation of signals at I.I Chundrigar Road as tidal flow system .

In response to the above mention letter from your office, we are attaching the requested document for your record and further necessary action. Please note that the up-gradation of traffic signals at I.I Chundrigar road is in one scope of work.

It is again re-integrated that the traffic signalization work as envisaged in the tender floated by KDA dated 8th April 2021, will result in duplicate of work and needs your immediate attention.

Executive Engineer
SMTA, GoS

A copy is forwarded for information to the: -

1. Managing Director, SPPRA GoS
2. Managing Director, SMTA, GoS
3. Director, Infrastructure/ Projects, SMTA, GoS
4. Project Director, Signals, SMTA, GoS
5. Ps to Secretary Transport SMTA GoS
6. Master File

Silicon
Communication & security

JV

Ghause
BUILDERS

SMTC/TS7979/2016
Dated. 09-04-2021

The
Director Infrastructure/Project,
SMTA TMTD
Government of Sindh,
Karachi.

SUB: <u>Tender invited by KDA on same work which is already in our ongoing project for UP-Gradation/Installation Of Traffic Signals In Karachi, Larkana, Mirpurkhas and Sukkur.</u>

Dear sir,

It is to inform you that M/S Karachi Development Authority Karachi has invited tender in local daily Dawn & Jung Dated 08-04-2021 for the Rehabilitation & Beautification of II.Chundrigar Road Karachi (Signalization Work) copy & BOQ downloaded from SSPRA Web site attached.

In this connection it is pointed out here that the installation of traffic signals along with Tidal flow system on the II.Chundrigar Road is already covered under the scope of work (ADP Scheme No.1863) awarded to us by SMTA TMTD GOS Karachi.

The work of installation of traffic signals and Tidal flow system is already under execution which is also in your kind knowledge.

In view of factual position explain above you are requested to take immediate necessary action in order to avoid any duplication and misuse of government funds.

We are looking forward to provide our best possible services & equipment's.

Thanking you
Yours sincerely

Faisal Sattar Daruwalla
(Managing Director)

CC
1 Secretary Transport SMTA TMTD
2 MD SMTA
3 Executive Engineer SMTA, TMTD

COPY ATTACHED
1.NIT / BOQ

B-44 Block -3 GULSHAN -E-IQBAL I KARACHI SCHEME NO 24 EMAIL-silicontraffic.pk@gmail.com
MOB-03008203293 TELL- 021-37725998 FAX-021-34911443

NOTICE INVITING TENDERS

(SINGLE-STAGE – ONE-ENVELOPE SYSTEM OF SPPRA)

According to SPPRA Rules 2010 (Amended time to time), the tenders in sealed covers (Single-Stage) are invited through leading newspaper / SPPRA (PPMS) and KDA websites for the following work from eligible interested contractors / firms / parties etc.

Sr. No	Name of Scheme	Estimated Cost (Million)	Bid Money 5% (Million)	Tender Fee (Million)	Time Allowed	PEC Category Codes
1.	REHABILITATION & BEAUTIFICATION OF I.I.CHUNDRIGAR ROAD, KARACHI (SIGNALIZATION WORK)	Offer Rate	5% of Bid Amount	0.003	06 Months	Category C-5 Codes EE-02, EE-03, EE-04, EE-06, EE-07, EE-08, EE-09 & EE-10

TERMS AND CONDITIONS OF THE TENDERS

1. Tender schedule shall be as follows:-

SCHEDULE	DATE & TIME	VENUE
1. Receiving of Application & Issuance of Tender	From 09-04-2021 to 28-04-2021 During Office Hours	Office of the Executive Engineer, Engineering Department Karachi Development Authority Room No. CR # 508, 5th Floor Civic Centre, Gulshan-e-Iqbal Karachi.
2. Dropping of Tender	29-04-2021 Till 11:00 a.m	Seminar Hall, 1st Floor, Karachi Development Authority, Civic Centre, Gulshan-e-Iqbal Karachi.
3. Opening of Tender	29-04-2021 at 11:30 a.m	Seminar Hall, 1st Floor, Karachi Development Authority, Civic Centre, Gulshan-e-Iqbal Karachi.

2. In case of any reasons, if the tenders are not responded on the above date, the next date of submission and opening of bids will be 20-05-2021 and the tender documents will also be available upto 19-05-2021.
3. The biding documents will be issued to the interested firms / contractors on submission of a written request on original letterhead from the owner of the firm or their authorized representatives having valid Special Power of Attorney on the stamp paper duly attested by Oath Commissioner and on payment of non-refundable cost of tender mentioned against each work, through call deposit/pay order on any scheduled bank in favor of Karachi Development Authority and biding document can also be downloaded from the SPPRA website (https://ppms.pprasindh.gov.pk/PPMS/) with tender fee mentioned as above.
4. The bid security equal to 5% of bid amount in shape of pay order from any scheduled bank in favor of Karachi Development Authority must be enclosed with tender documents, otherwise the tenders will be rejected.
5. The contractors must mention their complete and correct present postal address in tender documents and quote the rates both in words and in figures. Incomplete / conditional tenders will not be accepted.
6. If any fake documents are found then the tender is liable to be rejected / cancelled without any compensation and penalty as per rules will be imposed.
7. Canvassing in connection of tenders in strictly prohibited and tenders submitted by the contractors who are reported to be involved in canvassing will be liable for rejection.
8. All the tenders will be dropped on as per above schedule upto 11:00 am and will be opened by the Procurement Committee, in the office of the undersigned at 11:30 am in presence of such contractors / parties / firms / bidders who wish to be present.
9. In case, the date of opening is declared as a public holiday by the Government or non-working day due to any reason the next official working day shall be deemed to be the date for submission and opening of tenders at the same time.
10. Procuring Agency may reject all or any bid / tender at any time prior to the acceptance of a bid or proposal subject to the relevant provision of SPPRA Rules 2010 (amended time to time).
11. Tenders will not be received after the scheduled time.
12. **Eligibility Criteria:**
    a. NTN Certificate
    b. SRB Registration Certificate.
    c. Average annual turnover of at least 30 million duly supported by the Bank Statement & Audit Report (last 3 years each), which also shows the salaries of employees.
    d. Proof of relevant experience and details of at least one work executed/being executed indicating the name of project/scheme/works with cost, date of commencement & completion.
    e. Valid PEC 2020-21 and Category relevant field of specialization codes (where applicable).
    f. Affidavit / Undertaking regarding the firm never been blacklisted OR not involved in any court case/litigation with any Government/Semi-Government Department.
    g. Copy of CNIC

Note:

- All original documents must be shown upon the request of the procurement committee for verification.
- Failing in any of the category mentioned in Eligibility Criteria shall be declared the bidder disqualified.

Executive Engineer
Engineering Department
Karachi Development Authority

KDA-104/2021
INF-KRY No. 1166/2021

ہم سب رشوت ستانی کے خلاف ہیں **Say No to Corruption**

DAWN THURSDAY APRIL 8, 2021

KARACHI DEVELOPMENT AUTHORITY
ENGINEERING DEPARTMENT

VOLUME-II: BILL OF QUANTITIES
(SINGLE STAGE ONE ENVELOPE METHOD)
(alongwith Eligibility & Minimum Qualification Criteria & Method of Procurement)

REHABILITATATION & BEAUTIFICATION WORK OF I.I.CHUNDRIGAR ROAD, KARACHI (TRAFFIC SIGNALIZATION WORKS)

Estimated Cost : -	**Offer Rate Basis**
Bid Security : -	**Rs. 5.00% of Bid Amount**
Tender Cost : -	**Rs. 3,000 /-**

<u>NOTE :</u>
This Document contains 03 Pages excluding this page

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KARACHI DEVELOPMENT AUTHORITY
TRAFFIC ENGINEERING BUREAU

REHABILITATATION & BEAUTIFICATION WORK OF I.I.CHUNDRIGAR ROAD, KARACHI (TRAFFIC SIGNALIZATION WORKS)

Abstract Sheet

S. No.	Description of Item	Unit	Quantity	Rate	Amount
	NON SCHEDULE ITEMS				
1	Provding, Fixing & Commissioning of ST-800 Scoot Based or Equivalent Traffic Signal Controller with 16 Phase Switches Fitted Customized including Controller Case, controller Plinth	Nos.	2.00		
2	Providing & Fixing of Siemens Turkish / Swarco 3-Way Traffic Light Aspect Assembly (Red+Amber+Green) 200 MM Diameter (With Central Light Source LED Module) & Hood complete Housing & Cover Made UV-Stablized Polycarbonate, cover with snap action catch including LED Module in accordance with specification given.	Nos.	30.00		
3	Providing & Fixing of Siemens Turkish / Swarco 3-Way Traffic Light Aspect Assembly (Red+Amber+Green) 300 MM Diameter (With Central Light Source LED Module) & Hood complete Housing & Cover Made UV-Stablized Polycarbonate, cover with snap action catch including LED Module in accordance with specification given.	Nos.	8.00		
4	Providing & Fixing of Siemens Turkish / Swarco 2-Way Traffic Light Aspect Assembly (Red+Green) 200 MM Diameter (With Central Light Source LED Module) & Hood complete Housing & Cover Made UV-Stablized Polycarbonate, cover with snap action catch including LED Module in accordance with specification given.	Nos.	32.00		
5	Providing & Fixing of Siemens Turkish / Swarco or equivalent 1-Way Traffic Light Aspect Assembly (Green & Red) 300 MM Diameter & Hood complete Housing & Cover Made UV-Stablized Polycarbonate, cover with snap action catch including LED Module in accordance with specification given.	Each	176.00		
	Sign Size 3 feet x 4 feet				
6	Supplying & Installation of Standard Pole 12 feet Assembly with all necessary fitting, Pole Cap etc. complete including painting two coats with Synthetic Enamel paint as per Drawing.	Nos.	24.00		
7	Supplying & Installation of Mast Arm Pole assembly with all necessary fitting, Pole cap etc. complete including painting two coats with synthetic enamel paint as per drawing.	Nos.	8.00		
8	Providing Electrical Cable (12 Core, 1.5 MM square Solid @Cu@ Conductor, PVC insulated, PVC Bedded / PVC sheathed) including lying in duct strip back terminate and lable all cores including testing commissioning charges	Mtr	4,593.00		
9	Providing & fixing of incoming KESC Power Supply Metallic switch board of suitable size and sturdy design water / weather proof having lock and key arrangement and equipment with following 1) Circuit Breaker Single Phase, 2) Voltmeter, Single Phase (Imported) approved make & size, 3) Indication lamp.	Nos.	2.00		

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KARACHI DEVELOPMENT AUTHORITY
TRAFFIC ENGINEERING BUREAU

REHABILITATATION & BEAUTIFICATION WORK OF I.I.CHUNDRIGAR ROAD, KARACHI (TRAFFIC SIGNALIZATION WORKS)

Abstract Sheet

S. No.	Description of Item	Unit	Quantity	Rate	Amount
10	Supplying & Laying one number poly vinyl chloride pipe (PVC) "D" Class under footway from Drawpit to signal pole in accordandce with specification and drawing including cost of special, cutting, fitting, laying on pipe in trench, sand cushioning, back filling, providing and laying draw wire in duct and proper arrangement of light and safety devices, etc. disposal of surplus excavated material with 5 miles lead and complete with all respect as directed by the Engineer.	Mtr	525.00		
11	Construction of standard pole foundation as per drawing	Nos.	24.00		
12	Construction of Mast Arm Pole foundation as per drawing	Nos.	8.00		
13	Supplying & Laying one number best quality 4" Dia G.I.Pipe in duct under road carriageway footway as per drawing / design including breaking through surface excavation upto minimum depth 1"-8" under road way and 2"-8" footway or as required, providing sand, stone ballast for backfilling compaction, reinstatement of road or footway surface as per specification and approval of the Engineer including cutting, making, thread of pipe special as required laying of pipe painting two coats of bituminous paint on G.I.Pipe providing and placing of draw wire in duct and proper arrangement of light, traffic, barriers, safety devices for protection of traffic and disposal of surplus excavated material within three miles lead and complete with all respect as directed by the Engineer	Mtr	700.00		
14	Providing Chamber 3x3x1/4 (Minimum depth) as per approved design for cable duct draw chamber as shown on drawing and providing Rcc 1:2:4 cover in 3x3x1/4 MS angle of 30" of size and 1/4 thick 3.25"x3.25" MS angle frame fixed in 1:2:4 CC wall and making proper holes for ducting of all sizes in walls including exvcavated, backfilling cc 1:2:4 base, wall, slab, chain, chain fixing in wall and slab, complete with all respect as drawing and as directed by the Engineer. **Sign Size 3 feet x 4 feet**	Nos.	60.00		
15	Providing & Laying Power Cable 3 Core 6 MM	Mtr	207.00		
16	Providing & Fixing of Dual Colour (Red + Green) Countdown Timer 300 MM size with controller Cable etc. Complete	Nos.	16.00		
17	Preparation of intersection specification (s) of the individual intersection sites by carrying out Traffic Survey (for peak hours) planning, supervision and collection of Data, Analysis and Result for customized the Traffic vcontrollers Cls plans as well as phase / stage timing for each junction shall be prepared and provided to the Engineer for Approval in duplicate bounded form including trimming of controller updating of time plans.	Nos.	2.00		
18	Providing & Fixing of controllers for Tidal Flow System with GPS Clock to be synchronized in Time to operate the Lane control lights	Each	11.00		
	Total of NON-Schedule Items of Signalization Works. Rs.				

KARACHI DEVELOPMENT AUTHORITY
TRAFFIC ENGINEERING BUREAU

REHABILITATATION & BEAUTIFICATION WORK OF I.I.CHUNDRIGAR ROAD, KARACHI (TRAFFIC SIGNALIZATION WORKS)

QUOTED SUMMARY

Est. Cost	**Offer Rate Basis**
Time Limit	**06 Month**
Penalty	**0.1% of quoted amount**

S. No.	Description of Item	Amount in word	Amount in figures
1	Total Amount of Non Schedule Items	____________	____________
	G. Total Amount NON Schedule Items		

The total amount is Rs.______________________ (Rupees ______________________ ______________________) for the complete job for all schedule of rate, approved rate & offer rates (which ever is included in the BOQ) The same amount will be considered as final and announced at the time of opening of Bid. ______________________

I / We have attach a Bid Security as per NIT in shape of pay order bearing No.______________________

Dated: ______________ Amounting to Rs. ______________ issued from ______________________

NOTE:

- Tender must be qouted in figure & in word both otherwise laible to be cancelled.
- All over writing & correction if any must be initialed & stamped by the bidder.
- All SPPRA Rules / Notifications must be followed & If agreed, Contractor must sign and stamp the Quoted Bid.

Signature of contractor with stamp

Address: ______________________
____

Signature & stamp of tender issuing Authority

 c7e6685a20892f7415afb3eff3d76198d09c3014602f9e775e

No. SMTC/TMTD/SIGNALS/2017
GOVERNMENT OF SINDH
TRANSPORT & MASS TRANSIT
DEPARTMENT
Dated 09-11-2017

Tele. 021-35865392

Additional Director (Staff),
For Director General,
National Accountability Bureau
(Karachi),

Subject: **Provision of Information Under Section 27 of National Accountability Ordinance 1999 (3386/2017)**

I am directed to refer to your office Letter No CVC-3386/MC-383/NAB Karachi/2017/2, dated 28th September 2017 and to enclose herewith our detailed response, with the approval of the Competent Authority i.e. Secretary Transport & Mass Transit Department, for your perusal.

Enclosed:

Report [Annexures "A to G"]

Kashif Ali Khan 9/11/17
Deputy Director [Contracts & Procurement]
SMTC, GoS

Copy to:

1) Director General, Sindh Mass Transit Cell (SMTC),TMTD, GoS
2) Director infrastructure ,SMTC, TMTD, GoS
3) P.S to Secretary Transport & Mass Transit Department,
4) Master file

NATIONAL ... BUREAU
9/11/2017

(1)

SUBJECT: Provision of Information under Section 27 of National Accountability Ordinance 1999 (3386/2017)

UPGRADATION / INSTALLATION OF TRAFFIC SIGNALS IN KARACHI, HYDERABAD, SUKKHUR, MIRPURKHAS AND LARKANA

1. This office received a letter from National Accountability Bureau [the NAB] [Letter No. CVC-3386/MC-383/NAB Karachi/2017/2 in Flag A] dated 28th September 2017 referring to a complaint submitted to NAB and seek a clarification / report / supporting documents for the same.
   In the same regard, a brief history of the project is as under,

2. Considering the urban sprawl in Karachi and increasing vehicular traffic, Sindh Mass Transit Cell has undertaken a project of Upgradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas and Larkana. After the approval of the project PC 1, the procurement process was initiated and a Request for PreQualification was advertised as per SPPRA Rules.

3. Three prequalification documents were submitted submitted by the following companies,
   i) M/S Silicon Communication & Security
   ii) M/S Silicon Communication & Security JV M/S Ghause Builders
   iii) M/S Pak German Engineers

   These prequalification documents were opened and signed by the committee members before the authorized representative of bidders. M/s Silicon Communication & Security has submitted the documents as an individual lead firm (i, reflected above) and a lead firm with a joint venture (ii, reflected above). However, the procurement committee decided that a firm can be a lead firm either individually or with a JV but not with both. Hence, the technical proposal from M/s Silicon Communication & Security has been disqualified as an individual lead firm. Accordingly two companies were qualified. It is to be noted that M/s Pak German Engineers was held qualified only on the condition that they will submit their authorization certificate to provide SCOOT based system at the bidding stage and will submit i) Registration with PEC in Category EE-07 and CE-10 ii) Electrical License Government of Sindh iii) Registration with Sindh Board of Revenue. Subsequently the bidding documents were provided to these prequalified companies, dated 24th August 2017, with the deadline of submitting bids of 11th September 2017.

4. Only one bid was received i.e. from M/s Silicon Communication JV M/s Ghause Builders while M/s Pak German Engineers requested to extend the deadline of 11th September 2017 through an emailed correspondence at 5:29p.m. on 8th September. This request was however regretted on 11th September 2017 but encouraged them to participate in the bidding. This decision was taken considering the sufficient time given to the contractor for preparing the required documents. It may be noted that M/s Pak German Engineers came to buy the bidding document on 8th September 2017, i.e. the last working day before the bid submission deadline.

5. The procurement committee evaluated the bid and found no discrepancies in the calculations. Subsequently the procurement documents were to be submitted to SPPRA for hoisting on website.

6. In the same regard, a Draft Report [Flag B] along with the supporting documents is attached for the kind perusal of the Competent Authority.

[signature] 24/X/2017
Yousuf Munir
Director Infrastructure, SMTC

PS/Secy/Transport/ 5651.
Dated 26-10-2017

PA. D Y. No. 65.
dt: 31-10-2017.

7. **Director General, SMTC, TMTD**
   The draft report on the subject matter is attached at Flag 'B' for kind perusal and forwarding the same to the NAB.
   [signature] 24/X/2017

   Secretary (TMTD)
   Pl. examine reply of SMTA.
   [signature] (cont'd)

   AS (TMTD)

Subject: **Upgradation/ Installation of Traffic Signals in Karachi, Larkana, Mirpur Khas and Sukkur**

Sir,

A mega project is being launched by Govt. of Sindh department "Transport Mass Transit Department Block-7 Teen Talwar Clifton Karachi as mentioned in the subject. The base of this project is made on corruption right from its start. It is in violation of Sindh PPRA Rule 2010 because it is framed and made mandatory to quote only one system "SCOOT" for the operation of system and the equipment make and model fixed where as there are a number of similar systems in market which are more effective than "SCOOT" and cheaper. By Inviting Prequalification for obtaining of bids for a single selected system "SCOOT" depriving other more effect and cheaper system clearly indicates the malafide of the high ups of the Department, perhaps they have already committed with the supplier for procurement of SCOOT system and invitation of Prequalification is an eye wash. Had this corrupt Mafica Succeeded in their Nasty Ulterior motives there would be huge loss sustained by the Govt. of Sindh. Since it is an election year and the umbrella of N.A.B is likely to be over it will also a political issue faced by the Sindh Govt. during election, for which no justification can be provided and cannot be defended.

The documents are prepared without examining the ground position, no consultant backed the project to have responsibility of success of the proposed Mega Project. The document being floated are half backed and did not provide full quantum of work neither technically nor financially. Perhaps Siemen dealer representative has proposed the whole project to avoid participation of other good firms and to avoid competition.

45489

Sir you being engineer having good knowledge of project and good repute can well understand this Ulterior motives of the department.

The system "SCOOT basically handled by M/S Siemens who are famous of handling such issue being a good pay master and hide behind their foreign supplier. "SCOOT used in England where roads and highways are already designed for it. In Sindh and at Subject site the "SCOOT" will not successful as the road network is not designed to accommodate it. It will not only a shear lass to this Govt. but it is being a single system tender, violation of PPRA Rule 2010 as well as law of land. The group involved in it with the convenience of supplier would give huge loss to the Sindh Govt. a financial scandal and political disadvantage will be faced by the chief minister.

In view of the foregoing it is humbly prayed that the subject project may be reviewed and follow PPRA Rule2010, Put more than one system in Tender and invite international Tender to maintain transparency and fair competition, kindly reinvite the tender on the guide lines mentioned above to avoid any big scandal.

Your's truly

Patriot Department Employee

CC TO:

Honorable Chief Justice of Pakistan Islamabad.

✓ Chairman NAB Islamabad.

DG F.I.A Islamabad.

M.D Transparency Tariq Road Karachi.

ANNEXOR- B

REPORT

PRELUDE:

Traffic signal controls is one of the traffic management technique to provide safe passage to roadway users including vehicles, transits and pedestrians. Traffic signal allocates directional right of way via signal timing parameters including cycle length, splits, offsets and phases. These parameters are decided on the basis of traffic flow, geometric designs, road capacity and safety considerations.

Adaptive Traffic Control Systems (ATCS) dynamically respond to changes in traffic detected in real time. Two ATC systems which have been widely deployed all over the world for the last three decades are Split Cycle Offset Optimization Technique **[SCOOT]** and Sydney Coordinated Adaptive Traffic System **[SCATS]**. The SCOOT urban traffic control system was developed by the Transport Research Laboratory (TRL) in collaboration with the United Kingdom traffic systems industry. The SCAT system was originated in Sydney, Australia. Both systems can be described as fully adaptive with splits, cycles and offsets that are adjusted in real time. Both rely on extensive detector coverage and both are proprietary systems that are sold as packages though they are different conceptually and takes a different approach to measuring traffic flows and calculating signal timings.

TRAFFIC SIGNALS IN KARACHI:

Considering the urban sprawl of Karachi and ever increasing and deteriorating traffic conditions, a project was conceived with the funding from World Bank and M/S Halcrow Fox was appointed as a consultant by Traffic Engineering Berau **[TEB]**, Karachi Development Authority **[KDA]** through international competitive bidding. The consultants performed an extensive study and conducted various site surveys to note the traffic and infrastructure conditions in Karachi. Subsequently they provided their recommendations [Report in Annexure A] in which they highlighted that SCOOT central computer system should be considered as soon as possible.

The TEB proceeded accordingly and installed the first SCOOT based signal controls and presently 84 SCOOT based traffic signals are in operation in the city of Karachi.

Since the signals that are operating currently in Karachi are SCOOT based that's why the current project has been undertaken to upgrade the current signals besides installing the new ones [Locations in Annexure B]. It has been proven through research that installing two ATCS on the same network in the field is both impractical and too expensive [Conference Paper in Annexure C]. This implies that the current system can best be optimized and validated through upgradation to the same SCOOT strategy.

PROCUREMENT DETAILS:

The project "Upgradation / Installation of Traffic Signals in Karachi, Hyderabad, Sukkhur, Mirpurkhas & Larkana" was undertaken by the Sindh Mass Transit Cell, Transport & Mass Transit Department and Request for PreQualification was advertised accordingly

[Advertisement copy in Annexure D]. Three prequalification documents were submitted out of which two were declared qualified. These were M/s Silicon Communication & Security JV M/s Ghause Builders and M/s Pak German Engineers. It is to be noted that M/s Pak German Engineers was held qualified only on the condition that they will submit their authorization certificate to provide SCOOT based system at the bidding stage and will submit i) Registration with PEC in Category EE-07 and CE-10 ii) Electrical License Government of Sindh iii) Registration with Sindh Board of Revenue [Letters SMTC/TMTD/SIGNALS/05a and PGE/SMTC/713-17 in Annexure E]. Subsequently the bidding documents were provided to these prequalified companies, dated 24th August 2017, with the deadline of submitting bids of 11th September 2017 [Letters SMTC/TMTD/SIGNALS/2017/10d and SMTC/TMTD/SIGNALS/2017/10e in Annexure F]. However, only one bid was received i.e from M/s Silicon Communication JV M/s Ghause Builders while M/s Pak German Engineers requested to extend the deadline of 11th September 2017 through an emailed correspondence at 5:29p.m. on 8th September. This request was however regretted on 11th September 2017 but encouraged them to participate in the bidding [Letter SMTC/TMTD/SIGNALS/2017/12 and PGE/SMTC/089-17 in Annexure G]. This decision was taken considering the sufficient time given to the contractor for preparing the required documents. It may be noted that M/s Pak German Engineers came to buy the bidding document on 8th September 2017, i.e. the last working day before the bid submission deadline.

SPECIFIC RESPONSES TO THE CONCERNS RAISED BY THE COMPLAINANT:

Concerns / Issue	Response
Violation of Sindh PPRA rules 2010 because it is framed and made mandatory to quote only one system, i.e SCOOT for the operation system whereas there are number of similar system in market which are more effective than SCOOT and cheaper.	As mentioned above, the current traffic signals project is undertaken on SCOOT based strategy as the current signals in Karachi are being operated on the same strategy and as such the system upgradation can be done with in the same SCOOT strategy. In other words, SCOOT based system cannot be upgraded to SCAT based system and vice versa [evidence discussed above] else the project will be more expensive and impractical. Therefore no violation of procurement rules have been made.
The documents are prepared without examining the ground position, no consultant backed the project to have responsibility of success of the proposed mega project. The document being floated are half backed and did not provide full quantam of work neither technically nor financially. Perhaps Siemen dealer representative has proposed the whole project to	Since the Split Cycle Offset Optimize Technique [SCOOT] based strategy in Karachi was installed with the recommendations from the consultant M/s Halcrow Fox appointed by TEB, KDA under a World Bank funded project, therefore this cannot be said that the project is not backed by any consultant. Moreover it is clearly

avoid participation of other good firms and to avoid competition.	mentioned in the BOQs that Equivalent systems can also be installed besides Seimens based systems. Hence it cannot be claimed that the said project scheme is biased towards any particular vendor/supplier or violating procurement regulations.
In Sindh and at the subject site the SCOOT will not be successful as the road network is not designed to accommodate it.	Both SCOOT and SCAT systems are installed worldwide and this cannot be said that SCOOT based system is only suitable for roads in United Kingdom. The attached research paper is a clear evidence for this. Moreover as mentioned above, the recommendation to install traffic signals on SCOOT based strategy was given by the consultant after their due working. Therefore it cannot be said that the said strategy is not meant for the roads in Karachi.
The subject project may be reviewed and follow PPRA Rules 2010, put more than one system in Tender and invite international tender to maintain transparency and fair competition.	We feel that there is no need to invite international tender for this project as local expertise is present for the upgradation and installation of traffic signals all over Pakistan. Moreover, two systems cannot be mentioned in the tender because of the reasons mentioned in detail in Point 1.